A History of Jejueo

by

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DEDICATION

To my parents.

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Even in the most isolating moments of writing a dissertation during the Covid-19 pandemic, I have been fortunate to receive boundless support from my professors, mentors, family and friends. Truly, this project would not have been possible without a decade of guidance and support from many people both inside and outside academia. I owe my sincerest thanks to my advisor, Sally Thomason, who has never failed to surprise me with her patience and wisdom over many years. Sally's academic rigor and dedication to research and teaching have always inspired me, and indeed, the opportunity to work with Sally was the deciding factor for choosing to pursue my doctorate in linguistics at the University of Michigan. It is truly an honor that I have had the position of being Sally's final advisee, and I intend to pass all the gifts I received from Sally, on to my students in the future.

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LIST OF ABBREVIATIONS

ABL	ablative
ACC	accusative
ALL	allative
AUX	auxiliary
COM	comitative
CONJ	conjunction
DECL	declarative
DEM	demonstrative
DIST	distal
DM	discourse marker
EMP	emphatic
EXIST	existential
FO	formal register
GEN	genitive
HON	honorific
HORT	hortative
IMP	imperative
IND	indicative
LOC	locative
MK	Middle Korean
MSK	Modern Standard Korean
NOM	nominative
NMLZ	nominalizer
PLN	plain register
PROG	progressive
PROX	proximal
PRS	present
Q	interrogative
SE	sentence ender

TAGQ	tag question
TOP	topic
VOC	vocative

ABSTRACT

A driving concern of this dissertation is to develop a clearer picture of the history of the Koreanic language family by examining Jejueo's linguistic development over time. I aim to shed light on the relationships both between Jejueo and the modern dialects of Korean, and the contact effects that neighboring languages have had on Jejueo. My dissertation field work has two related aims: first I examine the linguistic ties between Jejueo and Middle Korean to try to determine the approximate period during which Jejueo split off from an earlier form of Korean. My second aim is to analyze Jejueo as it is spoken in the Osakan community, to isolate which features appear to be earlier forms of Jejueo now lost on Jeju Island, from features which have developed within this community due to linguistic contact with the majority language, Japanese, and to determine which features, if any, are due to internal linguistic changes over the last 100 years and are unique to Osakan Jejueo. Likewise, I examine Jejueo as it is currently spoken on Jeju Island, South Korea, to analyze contact effects from Modern Standard Korean (MSK) owing to 60 years of intensive language contact, as well as internal developments within Jejueo in the Jeju and Osaka communities. I apply the comparative method to try to identify the approximate period in which Jejueo split off from Korean to become an independent language.

The Jejueo spoken in Osaka is widely considered by Jejueo linguists to be a more conservative form of Jejueo that maintains more features of MK than the Jejueo spoken under heavy Korean influence on Jeju Island. Yet, little linguistic research has been conducted in the Osakan Jejueo community. My dissertation research will fill a gap in this knowledge, and in turn, shed light on some features of the early development of Korean.

In short, I found that Jejueo split off from Korean between approximately 1300-1500 CE based on the timing of structural changes in MK and the history of migration to Jeju Island. Currently, two separate varieties of Jejueo are developing on Jeju Island and in Osaka as a result of the two different contact environments. Both the variety in Jeju and the variety in Osaka, however, show evidence of language attrition and a shift to Modern Standard Korean. In Jeju, the pattern of language shift to MSK is clear, and the generations of Jejueo speakers are diverging to a greater and greater extent due to contact pressure from MSK and language ideologies that favor the prestige

language. In Osaka the picture is complicated in part by the diversity of languages in the linguistic marketplace of Tsuruhashi. Here, Jejueo speakers are trilingual, and often know multiple varieties of Korean. The Jejueo spoken by Jeju immigrants in Osaka conserves forms that have been lost on Jeju Island in the last decades, but these diverse lexemes and grammatical morphemes are also continuously evolving under contact with Korean.

Chapter 1

Introduction

This dissertation concerns the history of Jejueo, the indigenous language of Jeju Island, South Korea. The overall goal of my dissertation project is to develop a clearer picture of the history of the Koreanic language family by examining Jejueo's linguistic development over time. I aim to shed light on the relationships both between Jejueo and the modern dialects of Korean, and between Jejueo and Japanese.

The Koreanic language family is comprised of two languages, Korean and Jejueo. Modern Korean has at least seven dialects, which loosely follow provincial lines. Jejueo is thought to have 2-4 dialects within Jeju Island, with the clearest isoglosses dividing the north and south sides of the island, and subtler differences dividing east and west (Kang 2014). Differences in lexical choice and phonetic variation across dialects occur, such as the vowel variation in "hair" between the northern villages and southern villages respectively: *mʌrik̟arak* and *mʌrik̟ʌrʌk* (Kang 2014:129). Another variety of Jejueo is spoken by a large diasporic enclave of Jeju immigrants in Osaka, who arrived there in three waves over the course of the 20th century, the first in the era of the Japanese occupation of South Korea, 1910–1945, with the majority of immigrants arriving in the 1920s and 1930s. The second major wave of immigration by Jeju islanders to Osaka took place following what is known as the April 3rd Massacre in 1948, and throughout the years of the Korean War, 1950–1953. The final wave of Jeju immigration to Osaka was heaviest in the 1970s and tapered off in the 1980s (Hotta 2005). Osakan Jejueo is

considered by Jejueo linguists to be a more conservative dialect of the language (Ko 2009, Kang 2005), but existing literature on this dialect is extremely limited.

Korean and Jejueo are both thought to be the direct descendants of Middle Korean, which was spoken all over the Korean peninsula and on Jeju roughly between 918-1392 CE (Sohn 1999:44). Late Middle Korean (approximately following the invention of Hangeul in 1444 CE) is characterized by phonological and morphological developments from earlier Middle Korean. Late Middle Korean also saw many types of suffixal grammaticalization, such as the development of locative markers from adverbial postpositions in both MSK and Jejueo (Choi 1993, Ko 2014). Middle Korean is the earliest Koreanic language whose phonological system is extensively attested in writing, as Hangeul, the Korean writing system, was developed during this period. The extensive amounts of literature written in Hangeul from this period primarily reflect the dialect of the capital at that time in Gagyeong Province (present Gayseong, North Korea), (Sohn 1999:45) just north of modern-day Seoul.

The first part of this dissertation will inform the second part. In the first chapters I examine philological sources of MK and the current literature on the modern dialects of Korean to determine the phonological, morphological, and to a lesser extent lexical and pragmatic features of Korean spoken in the Middle Korean period. In the second part of this dissertation, I apply data gathered from Jejueo speakers in Jeju, Korea, and Osaka, Japan, to compare the earlier Koreanic features to the phonological, morphological, lexical and pragmatic features in these two varieties of Jejueo. My dissertation has two related aims: first I will examine the linguistic ties between Jejueo and Middle Korean to try to determine the approximate period during which Jejueo split off from Korean. My second aim is to analyze Jejueo as it is spoken in

the Osakan community, in order to distinguish between features that appear to be earlier forms of Jejueo now lost on Jeju Island and features that have developed within the Osaka community due to internal linguistic changes over the last 100 years and are therefore unique to Osakan Jejueo. I also aim to determine which features, if any, are due to linguistic contact with the majority language, Japanese. Likewise, I examine Jejueo as it is currently spoken on Jeju Island, South Korea, to analyze contact effects from MSK owing to 60 years of intensive language contact, as well as internal developments within Jejueo in the Jeju and Osaka communities.

Specifically, my research questions are these:

1. What innovations has Jejueo undergone due to internal linguistic change and external pressures from language contact?
2. Do these innovations shed light on when Jejueo split off from Korean?
3. As a sister language to Korean, can Jejueo tell us anything about earlier stages of Korean if we apply the comparative method?

The nature of the genetic and historical relationship between Japanese and Korean is a hotly contested issue in the historical linguistic literature. As most Korean linguists consider Jejueo a dialect of Korean rather than an independent language, historical linguistic research has relied on dialectal and philological research on Korean and has left comparative research on Jejueo largely untouched. My dissertation research fills a gap in the knowledge of Proto-Jejueo.

The dissertation is structured as follows. Chapter 2 provides a background of this study, highlighting topics in Jeju, Korean, and Osakan history that affected the development of the Koreanic languages. In Chapter 3 I discuss the phonological and morphological features of Middle Korean that provide the basis for an analysis of Jejueo's relation to the MK and the regional varieties of Korean. Chapter 4 provides an overview of the five modern dialects of

Korean and their relationship with MK. In chapter 5 I examine Jejueo comparatively with the modern dialects of Korean and MK, to determine which features are maintained from MK, which features appear to result from areal contact with modern dialects, and which feature are innovations in Jejueo. In this chapter I discuss where Jejueo falls in the Koreanic family tree as informed by the philological data. In chapter 6 I present my field work hypotheses, which include three separate case studies. I discuss the methods for obtaining field data on Jeju and in Osaka. and results, and the contact-based relationships between Jejueo, MSK, and Japanese in the Jeju and Osaka communities. Chapter 7 provides a summary of the dissertation and outlines the theoretical implications of my findings and possibilities for future inquiry on the topics discussed.

Chapter 2

Background History: Jeju, Korea, Osaka



Figure 1. Areas where Jejueo is spoken

Jeju Island, a province some 60 miles southwest of the Korean peninsula, has approximately 5,000-10,000 native speakers of its indigenous language, Jejueo, which is closely related to Korean. Although often referred to as a dialect of Korean, Jejueo is mutually unintelligible with Korean, owing to its unique lexicon, phonology, and morphology. Jejueo speakers are shifting rapidly to Korean, and most fluent speakers of Jejueo are over the age of 75, classifying Jejueo as critically endangered, according to UNESCO (2010). Due to the majority of Jeju immigrants' arrival in Osaka in the early to mid-20th century, before Jejueo

underwent massive language change, and the Osakan Jeju community's more limited contact with Seoul-based Korean media and education, the Jejueo spoken in Osaka maintains a more robust vocabulary and has undergone relatively little structural shift to Korean (Kang 2005, Saltzman 2014).

In the examples below from data I collected, I show simple declarative sentences in (1) Osakan Jejueo, (2) Jejuan Jeju and (3) Korean. Example (2) demonstrates the level of structural change to Korean, as the Jejueo lexemes and grammatical particles are marked in bold, showing that the overall construction is largely Korean, not Jejueo. In this example the speaker borrows Jejueo material: *harmang* 'grandmother' and some Jejueo grammatical morphemes attached to a Korean verb. Note that in Korean the conjunction suffixes *-oa* and *-koa* are allomorphs, where *-koa* follows an obstruent.

(1) Jejueo in Osaka

harmang -jʌŋ sontɕi -jʌŋ miḳaŋ -ɯl tʰa -ms -u -ta
grandmother-CONJ grandchild-CONJ orange-ACC pick-PRS[PROG]-FO-DECL
"The grandmother and grandchild are picking oranges."

(2) Jejueo on Jeju Island

harmang *-koa sontɕa -oa kjul -ɯl ṭa -ko* ***is -u-ta***
grandmother-CONJ grandchild-CONJ orange-ACC pick-PROG-EXIST[PRS]-**FO-DECL**
"The grandmother and grandchild are picking oranges."

(3) Korean

harmʌni -oa sontɕa -oa kjul -ɯl ṭa -ko iṣ -ʌjo
grandmother-CONJ grandchild-CONJ orange-ACC pick-PROG EXIST[PRS]-FO.DECL
"The grandmother and grandchild are picking oranges."

2.1 Jeju History

Located some 60 miles southwest of the Korean Peninsula, Jeju Island is the largest island in South Korea, approximately 100 square miles, with a population of 600,000, most of whom live in the largest city, Jeju City. Once an independent kingdom named Tamna, Jeju Island

was incorporated into Korea's Baekje Kingdom in 476 CE, allowing Baekje to exact tribute from Jeju citizens. Jeju continued its tributary relationship with mainland Korea under the Goryeo government (918-1392). During the Joseon era (1392-1897) Jeju's administrative authority was usurped by the central Joseon administration. Although Jeju citizens were technically citizens of Korea's southern Jeolla province, they were treated as foreigners and Jeju Island was used as a location for the exile of political prisoners. From the 19th until the early 20th century Jeju citizens were prohibited from entering mainland Korea, in order to avoid a population (tributary) drain, resulting in uprisings in 1862, 1898, and 1901 (Hilty 2011). A volcanic island with very little arable soil, Jeju's primary industries were agriculture and fishing, which were generally subsistence-oriented for individual families. In its relative independence from mainland Korea, Jeju citizens developed or preserved robust regional mythology and matriarchal culture, where female divers served as the economic heads of families. These economic and cultural systems stood in contrast to mainland Korea.

The *Samguk Sagi* 'History of the Three Kingdoms' (Kim 1145) and Goryeosa 'History of Goryeo' (Kim and Jeong 1613), indicate that the Tamna Kingdom interacted with other regions, including Baekje and Silla on the Korean mainland, as well as with Japan and China (Jeju National Museum 2001:96-97) (Yang 2018:13) but depictions of these historical encounters are not detailed. When the Mongolians invaded Goryeo (Korea) in 1231, the final battle was fought on Jeju Island, and Mongol forces controlled Jeju for approximately 100 years thereafter (Yang 2018:13, Kim 2008:156). During this period, many Jeju women married Mongols and raised families (Kim 2008:156). In 1374 12,000 Korean mainlanders moved to Jeju Island to drive out the Mongols and protect Goryeo from future invasions (Yang 2018:13, Lee 2005:82). After the long period of occupation, some Mongols remained in Jeju, and about 160 Mongolian

horses and various food sources, (e.g. buckwheat), had been introduced to Jeju. Linguists tend to agree that only about 200 lexical items from Mongolian were borrowed into Jeju during this period (Kang 1999), and most of these were equestrian-related vocabulary. The Goryeo administration renamed Tamna *Jeju*, "the province across the sea", in 1295.

Goryeo transitioned to the Joseon Dynasty (1392-1897) and early on designated Jeju Island an open-air prison for political exiles. Alongside an influx of Buddhist monks, criminals from the Korean mainland, and Chinese refugees, the Jeju population increased from approximately 19,000 in 1419 to 63,000 in 1435 (Yang 2018:13, *Sejongsillokjiriji* 1454). With the exploding population on Jeju Island, many islanders moved to the southern regions of Korea, Jeolla, Gyeongsang, and Chungcheong provinces, and some even moved to the northern areas of Pyeongango and Wanghaedo (Yang 2018:14, *Sejongsillok* 1454). To counteract the resulting population drain which jeopardized the tax revenue stream, the Joseon administration banned Jeju citizens from leaving Jeju Island in 1629 (Yang 2018:59, Injosillok 1653). For 200 years, Jeju remained isolated from the mainland. As Yang explains (2018:14-15), "As a result, [Jeju] was able to maintain a unique culture and language that also reflected the influence of Mongolian, Chinese, Japanese, and Korean." The ex-noblemen and scholars from the Joseon court became the majority of Jeju's educated population and played an instrumental role in the development of literary traditions on Jeju Island. In fact, three of Jeju's *O Hyeon* (5 exalted scholars) were exiles. The end of the Joseon dynasty was followed in relatively quick succession by Korea's colonization by Japan.

In 1910 Japan annexed Korea and Jeju citizens struggled through a period of deprivation. At this time many Jeju citizens left for the mainland or Japan to pursue economic opportunity. On April 3rd, 1948, during the period of ideological struggle preceding the Korean

War, communist sympathizers on Jeju attacked police stations and government offices. This event is known as the April 3rd uprising. The response from Korean and American military forces was a brutal suppression of suspected communist sympathizers, resulting in the deaths of 15,000-30,000 Jeju citizens between April, 1948 and May, 1949-- approximately 1/10 of the population of Jeju. The Jeju massacre was responsible for the deaths of 1/3 of the population of native Jejueo-speakers. When the Korean War began, hundreds of thousands of citizens of mainland Korea fled to Jeju to escape. By 1954 up to 40,000 Jeju citizens had escaped to Osaka, Japan (Cumings 2016:203).

Like elsewhere on the Korean peninsula, Japanese colonial policies starting in 1910 are closely linked with patterns of migration from Jeju to Japan in the following years. Though in all places on the Korean peninsula the impact that land reform and taxation had on farmers was a significant factor for migration to Japan, Jeju had other unique factors which led to heavy migration to Osaka in the Imperial Era. Jeju Island has two nicknames: *samdado*, "the island of three abundances", and *sammudo*, "the island of three absences". These three abundances are rocks, wind, and women, and the three absences are thieves, beggars and gates. The implication is that Jeju is relatively egalitarian, and this is in large part due to the difficulty of the environment, which led women to work hard and most Jeju households to be in a low economic bracket.

The Japanese built a modern economic infrastructure on Jeju, designed to exploit human and material resources for Japanese industries on Jeju and in Japan. Japanese increasingly settled on the island, mainly in the coastal areas of Jeju City and Seogwipo. New roads were constructed in 1917, linking Jeju City with coastal towns in the South, such as Seogwipo. As more commercial enterprise entered Seogwipo, the small village became the second largest city

on Jeju, home to fisheries, canneries, and many Japanese citizens. Today it is still the second largest city on Jeju. In 1924 a direct steamship line from Seogwipo to Osaka was established (Kim 2005). An intention of the Japanese colonial administration was to develop the infrastructure in particular areas of the island to open them to import/export industry. To achieve this goal, the administration immediately developed roads across the island to connect the towns where Japanese citizens lived, so that Japanese companies and settlers could develop businesses. In this way, the institution of capitalist enterprises on the island shifted and redistributed the Jeju population. The numbers of Jeju laborers who migrated to the coastal regions was not supported by the number of factory jobs available (Kashani 2006). In 1926 Japanese owned 16 factories on Jeju and Koreans owned 23 factories. The total employees for all factories was 359 people, or 0.2% of the population of Jeju. As the number of factories increased on Jeju, the percent of Jeju citizens employed by factories never rose over 1%. Although the modern sector caused internal migration on Jeju and the loss of agricultural and marine resources, industrial jobs never replaced these traditional sources of income and subsistence. For this reason as well, Jeju citizens migrated to Osaka in search of employment. As I will discuss, an impressive subsection of the Osakan immigrants were Jeju citizens.

2.1.1 Factors for Jeju citizens' immigration to Japan

On the eve of World War I Japan experienced an unprecedented economic boom. The rapid industrial expansion created a labor shortage in Japan. In 1911 a textile mill in Osaka pioneered the idea of importing Korean laborers to Japan, and soon other companies followed suit (Kawashima 2009). Because initially Korean laborers had no knowledge of Japanese and were illiterate (75% of mainland Koreans were illiterate in both Hiragana and Hangeul), they were employed as simple manual laborers (Kim 2005). Korean workers were also willing to

work longer hours and endure more adverse working conditions than Japanese workers. During the prewar period and into World War I it was customary for Japanese industries to dispatch recruiters to Korea and bring workers to small or mid-sized factories in Osaka and Kobe. Between 1914 and 1920 the number of factories and inflation in Japan both rose exponentially. Unfortunately, while general commodity prices in these years rose 300%, wages only increased by 250%, leading to increasingly unionized and politicized Japanese workers. An alternative solution for smaller factories in Osaka, Kobe, Fukuoka, and coal mines in Hokkaido to stem the tide of rising wages was to turn to the Korean colony. Companies began to recruit directly to peasants in the increasingly poverty-stricken southern provinces, Gyeongsang and Jeolla, which included Jeju at that time, seeking cheap, temporary, and non-unionized industrial labor (Kawashima 2009).

Some Japanese industries such as textiles and mining, tried to recruit cheap labor from Jeju. These were the first Jeju citizens to immigrate in large numbers to Osaka. The Osaka Textile Company and the Mitsubishi Mining Company in Fukuoka sent recruiters to the island in 1914 and in 1919 respectively (Hotta 2005). Jeju citizens had garnered a reputation for being subservient and more “assimilable” than mainland Koreans, and unlikely to cause labor disputes. Another major factor for Jeju people’s immigration to Osaka was the 1920 outbreak of cholera on Jeju. Between 1920 and 1922 the numbers of Jeju citizens migrating to Osaka escalated, due in part to the local colonial government’s encouragement of migration (Hotta 2005, Rands 2011).

Lastly, in 1923 a direct ferry service with no visa required was established, linking Jeju City with Osaka. This regular shipping line was the *Kimigayo Maru,* which was started by *Amagasaki* Steamship Service and lasted over twenty years, in response to the government's efforts to solve serious labor shortages in Japanese industry. The cities and villages on Jeju which

saw the highest numbers of citizens migrating to Osaka indicate some of the motivations for Jeju citizens' migration. The region which sent the largest number of migrants was Jeju City, which had been an administrative and commercial center of the island with a population of over 10,000 and many villages in its vicinity. Each village in the region sent between 500 and 900 persons to Japan (Rands 2010). The Jeju City region is known for farming, boasting the best soil on Jeju. The population is also highest on the island, households have the smallest average amount of arable land, and in this region tenant farming is more common. Unlike other regions on Jeju, in Jeju City class distinctions between landowners and landless peasants existed before the Japanese occupation. This region also experienced the earliest and highest concentration of Japanese settlement and farming. Finally, Jeju City was the first location on Jeju Island that saw direct recruitment by Japanese factories (Hotta 2005).

Other regions to send very high numbers of migrants to Osaka were Hallim, on the northwest coast of Jeju, and Seogwipo on the south-central coast. Both of these regions had seen large numbers of Japanese settlement and were the sites of intensive industrial development. Each village in Hallim sent 200-300 people, while each village in Seogwipo sent 100-300 people. Hallim, next to Jeju City, was the site of a high concentration of fisheries and canneries, as well as raw cotton fields. Jeju laborers could gain experience in factory work, as well as gain information about employment in Osaka. Moreover, Hallim was intensely overpopulated, with the highest population density on the island, at 1,798 people per square kilometer (Hotta 2005). This left very little arable land per household. Seogwipo was also the site of incredible economic development and overpopulation. Moreover, Seogwipo was a highly active port on the island and an easy point of embarkment for travel to Japan.

2.1.1.1 Social support systems for Jeju citizens

As Korea became industrialized and privatized, and feudal society disintegrated under Japanese reforms, Koreans could no longer rely on the benevolence of the upper class (*yangban*) to extricate them from financial distress. Instead, Jeju citizens formed a voluntary mutual assistance association referred to as *gye*. *Gye* spread widely among Jeju villagers, who typically belonged to the same low economic stratum. There were several types of *gyes*, including wedding, funeral, and most commonly neighborhood *gyes*, whereby residents pooled resources to overcome economic hardships. Through this agency, even the poorest Jeju citizens could afford the ferry expense to migrate to Osaka (Hotta 2005).

By 1924 the Jeju community in Osaka was fairly well established. Similar to the *gye* system, Jeju families already established in Osaka transmitted information and assistance to acquaintances on Jeju, easing their migration to Osaka. This process, known as "chain migration", allows migrants to make use of social networks in obtaining jobs and finding accommodations in a new location, which in turn allows larger numbers of migrants to successfully relocate. After the 1920s, chain migration replaced recruitment, oftentimes enabling people from particular villages or towns on Jeju to work in the same company and settle in the same neighborhoods (Kawashima 2009).

2.1.1.2 Housing in Osaka

The new immigrants to Osaka were relocated to areas outside the Osaka rail loop. As numbers of Korean immigrants in Osaka increased, so did segregation in housing. While Jeju Koreans comprised 9.3% of the Korean population in Japan, they were 22.2% of the population of Osaka, and 75.8% of Jeju immigrants lived in Osaka (Rands 2010). The development of the Jeju community was centered around Higashinari Ward, which contained a large number of small

factories. Korean immigrants in Higashinari Ward were mainly unskilled factory workers coming from Jeju Island. This partly reflected a sharp division between Koreans from Jeju Island and those from the Korean mainland. During the 1920s, Higashinari Ward, which experienced internal and external migration, developed into a working-class community, especially for unskilled workers (Hotta 2005).



Figure 2. Higashinari Ward, Osaka

The segregated Korean community in Higashinari began to appear as class and race divisions came into existence. The level of segregation in certain areas such as *Chosen-machi* and *Ikaino* was quite high. Overall, the degree of isolation of Koreans increased in response to the growth of the Korean population. Koreans faced harsh housing discrimination and strong resistance from Japanese neighborhoods. (Hotta 2005, Hicks 1997).

Osaka's Korean population also shows a distinctive characteristic with respect to its province of origin. In September 1925 there were 31,305 Koreans in the Osaka Metropolitan

Prefecture and 40% of them were from Jeju Island. Although after 1930 the percentage of Jeju Islanders in Osaka declined, 35% of Koreans were still originally from Jeju Island in 1931 (Ko 2013).

Many Korean communities in Osaka were formed according to their hometowns: while Koreans from Jeolla Namdo, mainly from Jeju Island, concentrated in Higashinari Ward, a majority of Koreans from North and South Gyeongsang lived in Higashiyodogawa Ward. This was due in part to the strained relationship between Jeju and mainland Koreans, as well as the lack of a shared language between Korean and Jejueo speakers.

2.1.1.3 Jeju Koreans and other minority communities in Osaka

An ideology of anti-miscegenation, derived from eugenics, pervaded the social structure of Osaka in the early decades of the 20th century. This ideology contributed to sustaining Koreans' separation from other ethnic groups and grew more fervent in the 1930s as numbers of migrants escalated and Japanese policies were informed by nationalism. Koreans, *burakumin*[1], the lowest class in Japan, and Okinawans worked in the same factory, but they were kept in different sectors due to segregation within the factory. Although the given cause for segregation was a difference in customs or language, the effect was to uphold suspicion and distrust of other minority groups in Japan rather than solidarity. Employers attempted to delineate boundaries between *burakumin* and Okinawans, who belonged to the colonizers, and Koreans, who were colonial subjects, through organization of living and working space (Hotta 2005).

Japanese employers divided Koreans and Japanese further into ethnic subgroups. In the

[1] *Burakumin* literally translates to "people of the village" and refers to the outcasts of the Japanese four-tiered feudal society.

case of Koreans, division was made according to region, e.g. between Jeju Islanders and mainlanders. By exploiting the question of Jeju people's national identity, Japanese officials and scholars often portrayed Jeju Islanders as a racially distinct people who could more smoothly assimilate into Japanese culture (Rands 2009).

Segregation expanded to all domains of social life in Osaka. In the Kishiwada Cotton Spinning Company Korean and Okinawan female workers were assigned separate rooms in the second floor of the dormitory and were segregated from their Japanese counterparts, including a large number of *burakumin.* Likewise, the various worker groups were segregated in all other domains, such as the cafeteria and bath. *Buraku* female workers, regardless of region of origin, were housed together in company dormitories. On the contrary, Japanese women who were not *burakumin* lived in independent housing and commuted to the factory (Hotta 2005). The almost direct translation of the *burakumin* to Korea's outcast group, *baekchong*, complicates social hierarchies, as the majority of struggling Korean laborers in Osaka harbored negative attitudes toward *burakumin* and voluntarily distanced themselves from the group, while *burakumin* did the same. Though Okinawans shared experiences of job and housing discrimination with Koreans, the group held a social identity that was closer to the center of a true Japanese identity, and Okinawans' perceptions of Koreans were largely shaped by the racial hierarchy under the Japanese empire (Hotta 2005). Owing to the job and housing discrimination that Jeju migrants to Osaka faced upon landing as well as their unique language, Jeju stayed and developed their community within the Higashinari District, which remains robust today.

2.1.2 Recent Jeju history and current developments

In 1971, Korean President Chung-Hee Park instituted economic and social reforms throughout Korea aimed at unifying Korea to secure economic growth. The "New Village

Movement" policies banned the practice of Jeju's shamanic religion, the medium through which Jeju's oral history was transmitted, as Jejueo was an unwritten language until the 1980's. Korean was made the official language of educational instruction, media and governmental activity. The resulting diglossia, compounded with the population loss and influx of Korean-speaking immigrants, led to the interruption in the transmission of Jejueo to subsequent generations.

Jeju's language policies in large part have followed the centralized policies of the national government since 1971. In that year President Chung-Hee Park's New Village Movement dictated that Standard Seoul Korean would be used in Jeju in media, government, education, commerce, and religion, to the exclusion of Jejueo. By the early 2000's, however, language policies unique to Jeju Island began to gain traction. In 2002 Dae-Jun Kim's administration pushed an unsuccessful initiative to establish "Special Economic Zones" where English could be used as an official language. This idea was revisited in 2005, when the Moo-Hyun Roh administration advocated for policy decentralization, and Jeju was granted status as a Special Self-Governing Province. The Jeju provincial government was quick to draw up a master plan which proposed the adoption of English as an official language of the Free International Jeju City, along with tax incentives, no customs, no-visa entry, etc. The official status of English on Jeju Island would mandate English, not Korean, as the medium of instruction in schools on the island. The proposal was initially supported by the Ministry of Education and Human Resources (Moon 2009:309), but in the midst of strong opposition from different sections of the society, the proposal to make English an official language of Jeju Island was withdrawn. After the Jeju Provincial Government's third unsuccessful proposal of English as an official language in 2007, the government has turned to inviting leading American, British and Canadian schools to open their campuses on the island, attracting overseas investment and offering Koreans a cheaper

alternative to English study abroad. Two English-immersion international schools opened in 2011, and 10 more schools were projected to open on Jeju by 2015. However, by 2016 the number had only grown to 3 international schools on Jeju (Song 2012). The vast majority of Jeju citizens, like Koreans on the mainland, are not fluent in English, though the prevalence of basic English lessons in schools and the appearance of English words and phrases in the media and commerce since the 1980's, has triggered the infusion of English loanwords into Korean.

Also in 2007, the Jeju local government released the Language Act for Jejueo Conservation and Promotion and revised it later in 2011. The Language Act was the first attempt at non-centralized language policy made by a province in Korea, and the first instance of using the term "Jejueo" in an official capacity. Since 2011, the Jeju Office of Education has released the General Plan for Jejueo Conservation Education annually. According to a General Plan, Jejueo education in public schools is encouraged as part of extracurricular activities or should be incorporated into regular classes if relevant (Yang 2013). The 2011 budget for 'dialect preservation' totaled 43 million won (roughly $40,000): 10 million won for the annual speech contest, 8 million won for teacher instruction, and 25 million won for Internet broadcasting, and no funding allocated for the installation of language learning programs in schools. Although the Jeju Office of Education is now charged with recommending Jejueo language policies, funding from the provincial government has not grown and individual NGOs, schools, and committees are tasked with the development and implementation of Jejueo policy and corpus planning. One such committee, The Jeju Language Center, consists of 16 members including Jeju linguistics scholars, a poet, two Cultural Policy Division staff, and representatives of local cultural organizations. A second committee has formed through Jeju National University for the purpose of research and publication, a third through the Jeju Development Institute and an NGO called

the Jejueo Preservation Society, has been active since 2010. All of these individual groups develop Jejueo educational materials and conduct infrequent Jejueo classes. However, with no centralized government agency tasked with Jejueo language and corpus planning, Jejueo revitalization is tossed between private NGOs and committees, as is the case for other minority languages in South Korea, such as those spoken by immigrant communities.

2.1.2.1 Support for Jejueo in Jeju schools

In March 2015, following UNESCO's negative assessment of actions taken to revitalize the critically endangered language of Jejueo, the Jeju Office of Education ordered primary school instructors to teach one hour of Jejueo language curriculum per day. In the months following the order, however, Jeju schools showed little change in the allocation of class hours, which continue to align with the centralized education policies outlined earlier in this paper (Southcott p.c. 2015).

According to Yang (2015) only a handful of public school teachers are known to be teaching Jejueo unofficially based on their interest. There has not been any formal report on the number of teachers who are teaching Jejueo around the island. In terms of pedagogical materials, eight textbooks have been distributed through the website of the Jeju Office of Education and are freely accessible for anyone. However, the textbooks do not include a teachers' guide and their physical appearance is not yet sophisticated compared to that of other L2 textbooks. In addition, there is no standard format or content across the textbooks, and no standard Jejueo curriculum or regular teacher training programs are available. The Jeju local government and the Jeju Office of Education have shown no sign of selecting Jejueo as a subject in public schools yet. However, their encouragement for schools and teachers to teach Jejueo as an optional extra-curricular course seems to continue even without support from parents, teachers, or students (Southcott

2014).

2.1.2.2 Tourism in Jeju

The rise of Jeju's massive tourism boom can be traced to Korean governmental campaigns to boost domestic tourism in the 1970s. The Law to Promote Tourism Complex (Resort) Development was enacted in 1975, and Jeju saw the first such post legislation development, the Jungmun Tourism Complex, in 1978 (Kang et al. 2014).

In 2005 the Moo-Hyun Roh administration advocated for policy decentralization, and Jeju was granted status as a Special Self-Governing Province. The Jeju provincial government was quick to draw up a master plan which proposed tax incentives, no customs, no-visa entry to encourage domestic and foreign tourists to visit Jeju. In 1966 only 100,000 tourists came to the island in one year. By 1983 that had increased to 1 million and by 2005 that number had increased further still to 5 million. In 2015, 14 million tourists arrived and Seoul Gimpo-Jeju was the busiest airline route in the world for the third consecutive year (Southcott 2015). The Jeju Provincial Government's policies encouraging investment also support the tourism industry, as billions of dollars are invested in developing shopping complexes, resorts, and hotels every year (Southcott 2015).

2.1.2.3 Domestic immigration and 'Back-to-Landers'

Straddling the line between venture capitalism and idealistic pioneering are Jeju's other group of migrants: 'Back-to-Landers' from mainland Korea. For the first time in the last two generations Seoul has lost more residents than it has gained. This is due, in some part, to the tens of thousands of mainlanders moving to Jeju to obtain a slower pace of life. According to anthropologist Agnes Sohn, other Back-to-Landers are young people looking to embrace Jeju's slower pace of life. In mid-mountain towns like Gasi-ri, hip young people are having a go at

country life, starting up farms and small businesses alongside the local elders. Sohn's research focuses on four specific groups implicated in this meeting of the old and new: IT enthusiasts, artists and curators, farmers, and small-business owners. The first generation of mainlander migrants came 20 years ago, and the influx has steadily grown ever since. This is in part because of government incentives: low-interest loans, insurance benefits, and various grants (Bush 2015). Life on Jeju appears to offer an alternative to the pace of a Seoul work life, where securing positions in *jaebeol* (conglomerates) in part spurs the culture of fierce competition. Moreover, the famous "matriarchal culture" of Jeju appears to attract greater numbers of female Back-to-Landers hoping for an alternative to the patriarchal culture of mainstream Korea.

2.2 Korean and Jejueo linguistic history

The origins of the Korean people and the Koreanic language family are not well understood. Jejueo is considered by Korean scholars to be either a language or dialect which split off from Korean during the Middle Korean era. Jeju people are similarly considered ethnically indistinct from mainland Koreans. Vigorous comparative research on Korean has been undertaken since at least 1879 (see Aston 1879) but with little widely-accepted evidence of a genetic affiliation with any language outside of the Korean peninsula. Among the most prominent theories are the Altaic hypothesis and the hypothesis that Korean and Japanese are related. The proposed Altaic family includes languages spoken across northern Asia, including Korean and Japanese, from Anatolia and the Volga basin to the northern coast of northeastern Siberia. It is traditionally made up of three branches: Turkic, Mongolic, and Tungusic. Each of these three branches is a well-established family in its own right. Less clear is the relationship linking the proposed three branches together, as (among other problems) linguistic correspondences may be obfuscated by their prolonged close cultural contact (Lee and Ramsey

2011:20). For these reasons the Altaic hypothesis remains highly controversial.

2.2.1 Scholarship on Korean historical linguistics

Several scholars have applied the comparative method in an effort to establish a set of regular sound correspondences between Korean and Altaic languages. However, the proposed lexical matches have not yet been numerous or systematic enough to prove a genetic affiliation (Lee and Ramsey 2011:20), as they leave room for the possibility of chance and/or borrowing.

One of the primary phonological features that has been pointed to as evidence of the Altaic Hypothesis is vowel harmony. Altaicists generally reconstruct "Proto-Altaic" with a vowel harmony system, as Turkic, Mongolic, and Tungusic languages have vowel harmony. On the basis of Early Middle Korean (11th century CE) as recorded in the *Samguk Sagi*, a document of the history of Korea which contains early Middle Korean pronunciations of place names, Lee and Ramsey (2011:17) posit that Korean had a similar system of vowel harmony. Table 1 below shows the system of front-back vowel harmony in MK.

Front vowels					Back vowels				
	1	2	3	4	5	6	7	8	9
Proto-Altaic	*e	* ë	*ö	*ü	*a	*o	*u	* ï	*a
Early MK	*ä	*i	* ɔ̈	*ü	*a	* ɔ	*u	*i	*a
Late MK	/ʌ/	/i/	/ɨ	/u/	/a/	/ɔ/	/o/	/i/	/a/

Table 1. Vowel harmony in "Proto-Altaic", Early MK and Late MK

Adapted from Lee and Ramsey 2011:17

Earlier even than the Altaic Hypothesis, scholars have attempted to demonstrate a genetic relationship between Korean and Japanese (Lee and Ramsey 2011:16). The morphological and syntactic structures of the two languages are certainly similar enough to

warrant these comparisons, which have been ongoing since comments made by the Confucian scholar Hakuseki in 1717. Serious comparative research between Japanese and Korean began with Aston in 1879 and continued with Samuel E. Martin's article in *Language* in 1966, "Lexical evidence relating Korean to Japanese". Still, like attempts to compare Korean with Altaic languages, proposed cognates have proven insufficient as proof of a genetic relationship, and sound/meaning correspondences have been shaky. More recent scholars (Beckwith 2004, Francis-Ratte 2016, Beckwith 2010) have not fared much better in proving a genetic link between Japanese and Korean. In recent years, Korean historical linguistic scholarship has shifted focus to uncovering the history of Proto-Japanese and Proto-Korean to understand the extent of the morphological and phonological changes in the two languages. Now, rather than directly comparing Korean with Japanese or Altaic languages, scholars are focusing first on reconstructing earlier stages of each language independently through internal reconstruction of dialects of each language (Lee and Ramsey 2011:21).

Before the MK period, which began in the late 11th century, the language or languages spoken on the Korean peninsula are very poorly attested. During the Three Kingdoms period (57 BCE- 668 CE), three languages, Goguryeo, Baekje and Silla, were spoken in the peninsula. However, scholars have only linguistic evidence for one—Goguryeo—and it amounts only to toponyms listed in the *Samguk Sagi* (Lee and Ramsey 2011:38). Baekje, which was spoken in the Southwest region (now Jeolla province), appears to have left little to no linguistic evidence behind. It is not clear whether the three varieties, Goguryeo, Baekje, and Silla, were mutually intelligible (see Vovin 2005).

2.2.2 Scholarship on Jejueo historical linguistics

Due to its isolation from mainland Korea, and its position along Eastern trade routes, the

Jejueo language retains many Middle Korean features as compared with the modern Korean dialects, as well as contact features from Japanese, Manchu, and Mongolian (Kiaer 2014). The Koreanic language family consists of two languages, Jejueo and Korean[2]. Pilot research (Yang 2013) estimates that 20-25% of the lexicons of Jejueo and Korean overlap, and a recent study (O'Grady 2015) found that Jejueo is at most 12% intelligible to speakers of Korean on Korea's mainland. In a 2015 study O'Grady found that speakers of Korean from four provinces on the mainland had rates of 8-12% intelligibility for Jejueo based on a comprehension task of a one-minute recording of connected Jejueo speech. As will be discussed in detail in Chapter 5, Jejueo conserves many Middle Korean phonological and lexical features lost to Korean, including the Middle Korean phoneme /ɔ/ and terms such as *pɨzʌp* : Jejueo *pusʌp* 'charcoal burner' (Stonham 2011: 97). Extensive lexical and morphological borrowing from Japanese, Mongolian and Manchu is evident in Jejueo, owing to the Mongolian colonization of Jeju in the 13th and 14th centuries, Japan's annexation of Korea and occupation of Jeju between 1910 and 1945, and centuries of trade with Manchuria and Japan (Martin 1993). Several place names on Jeju are arguably Japonic in origin, e.g. Tamna, the first known name of Jeju Island (Kwen 1994:167, Vovin 2013). Moreover, several names for indigenous fruits and vegetables on Jeju are borrowed from Japanese, e.g. *miḳaŋ* 'orange'. Mongolic speakers left the lexical imprint of a robust inventory of terms describing horses and cows, e.g. *mɔl* 'horse'. Jejueo borrowed grammatical morphemes from the Tungusic language Manchu, e.g. the dative suffixal particle **de* < *ti* 'to' (Kang 2005).

[2] In this dissertation I define language versus dialect in terms of the degree of mutual intelligibility between two codes. In the case under discussion, Korean and Jejueo are independent languages because they have a low degree of mutual intelligibility.

2.3 Summary

In this chapter we have seen the history of contact and subjugation by outside forces on Jeju Island, which has led directly to changes in migration, both of mainlanders migrating to Jeju Island, and Jeju Islanders migrating to Osaka, Japan. Changes in population demographics and the restrictive language policies of the reform movement in Korea of the 1970's directly impacted the state of the Jejueo language and led to its decline amongst speakers, eventually leading to the language loss prevalent in both Jeju and Osaka in current times.

In this chapter I have also discussed the state of historical linguistic research on Jejueo, and more broadly on the Koreanic language family, and the efforts of linguistic scholars to present a genealogy of the Koreanic family from the Three Kingdoms period to the present day. I have presented the major linguistic theories on the topic of Korean historical linguistics, including the Altaic hypothesis and the Japanese-Korean theory, as well as more recent efforts to reconstruct Proto-Korean using internal reconstruction. In the next chapter we will see how Middle Korean (918-1592 CE), particularly with the advent of the Korean writing system, Hangeul, dramatically opened up visibility to this earlier stage of Korean, from which modern Jejueo and the modern dialects of Korean developed.

Chapter 3

Linguistic History: Relevant Aspects of Middle Korean



Figure 3. Maps of the Korean peninsula during the Middle Korean period, when Korea was home to the Goryeo dynastic kingdom. Left: Goryeo in the 11th century; right: Goryeo in the 14th century.

This chapter begins with the description of Middle Korean (MK) features that are relevant to understanding Jejueo and the modern dialects. MK was the stage of the Korean language which lasted from the 10th century until the end of the 16th century. According to Lee and Ramsey (2011:77), MK

> "…began with the establishment of the Koryŏ [Goryeo] dynasty in AD 918, when the new government moved the capital from Kyŏngju [Gyeongju], in the southeast, to Kaegyŏng [Gaegyeong] (later to be renamed Kaesŏng [Gaeseong]) 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."

Sohn (2015:1) notes the distinction between the earlier and later periods within the Middle Korean era:

> Early Middle Korean covers the Koryo [Goryeo] dynasty period [918-1392 CE], while Late Middle Korean covers the first two centuries of Choson [Joseon] dynasty

[1392-1897 CE] until the time of Japanese Invasion in 1592 and the subsequent Seven Year Wars (*Imjin Waeran*).

The earlier stage of MK, referred to as Early Middle Korean (EMK), predates the invention of the Hangeul script and is transcribed mainly by means of Chinese phonograms. A recorded Korean word was transcribed using two glosses: the first was a Chinese character linked to the meaning of the word. The second gloss was a Chinese phonogram that represented the Korean pronunciation by using a complex system of Chinese characters which stood for the Korean translated word and its pronunciation and was therefore used to represent a similar pronunciation in the word being transcribed.[3] For example, 火'fire' was associated with Korean *bul* 'fire,' then it became a way to transcribe any syllable pronounced [pul] (Lee and Ramsey 2011:88). After the script Hangeul[4] was published in 1446 the transcription of Korean became much easier and scribes built a large body of religious and official literature along with a much smaller collection of common speech, in what is now Seoul.

The following subsections show which features of MK developed in different ways in different dialects. I include information on structural changes, e.g., sound changes, that differentiated the modern dialects from each other, eventually forming featural isoglosses in Korea. I include other features that were maintained by Jejueo alone, such as the process of strict vowel harmony. Features that were maintained equally across all modern dialects and Jejueo are

[3] The *Hyangyak kugeoppang* (鄕藥救急方) contains many examples of transcriptions like 置等ㅅ只, which later became the fifteenth-century word *tutiɾʌki* 'rash'. All four Chinese characters were phonograms, but the first two were used for their semantic associations (Lee and Ramsey 2011:88).

[4] Hangeul is a writing system comprised of consonants and vowels that are systematically modified to indicate phonetic features. In MK the full phonemic inventory of Korean was represented by 28 individual characters within the writing system that combined vertically to form (C)(C)V(C)(C) syllables.

not included in this chapter, as they cannot help determine the separate historical paths of development across the Korean peninsula. For this reason, syntax is not included, as late MK syntax has generally been maintained by the Korean dialects and Jejueo.

3.1 Phonology

There is a process of palatalization that is much discussed in the Korean dialects and Jejueo, as we will see in chapters 4 and 5. MK consonants did not undergo palatalization in any environment.

The consonant inventory of the Late Middle Korean (LMK) period is shown in Table 1 below with allophones given in square brackets. (Sohn 2015:5)

	Bilabial	Alveolar	Palatal	Velar	Glottal
Plosive: lax	p [p,β]	t [t,d]	tɕ [tɕ,dʑ]	k [k,ɣ]	
Aspirated	p^h	t^h	$tɕ^h$	k^h	
Tense	p͈	t͈	t͈ɕ	k͈	
Fricative voiceless lax		s [s,z]			h
Voiceless tense		s͈			h͈
Nasal	m	n		ŋ	
Liquid		ɾ [ɾ,l]			
Glide	w		j		

Table 2. Middle Korean consonant phonemes

By the 14th century MK in the Central dialects region had undergone phonological changes affecting *p, s* and *k*. According to Lee and Ramsey (2011:136-144), within the Central dialects, which included the capital where the MK orthography was standardized, and partially in the Pyeongan dialect, MK developed three voiced fricatives *β, z,* and *ɣ,* which occurred in voiced environments and alternated allophonically with *p, s,* and *k*. The allophones [β z ɣ] are sometimes considered phonemes in the literature, owing to each allophone having had its own

orthographic representation in MK, separate from the unvoiced allophones /p s k/. However, apart from a small set of ideophones containing *z* word-initially, the allophones [β z ɣ] only occurred in voiced environments.

The voiced bilabial fricative consonant *β* alternated allophonically with *p*. The allophone *β* occurred only in the following voiced environments: V_V, j_V, ɾ_V, z_V, as shown in examples 4-7. Although *β* lenited to a glide *w* in approximately 1450, examples of words containing the MK bilabial stop *p* from the stage before frication can be found in modern Korean dialects outside the Central region, where the change in frication did not occur. For example, the Gyeongsang dialect *sɛpi* is the reflex of MK **sapi* 'shrimp' and the Hamgyeong dialect *tɕʰipʌ* is the reflex of MK **tɕʰipʌ* 'cold' (Lee and Ramsey 2011:136). As Lee and Ramsey (2011:138) point out, in some cases when *p* appears in the coda of an irregular verb in MK in the Central dialects, such as *tɕap-ta* grab-DECL 'grab' *p* does not undergo frication, e.g. *tɕap-a* grab-DECL 'grabs'. This inconsistency may show that paradigm leveling occurred throughout the Central dialects, since in Korean and Jejueo, *p* undergoes voicing, not frication, between vowels, e.g. [tɕab-a] in both languages. Examples 4-7 show the voicing and frication of /p/ word-medially in the Central dialects in MK.

(4) V_V

a) *kɔɾɔ**β**i* 'drizzle, fine rain'
compound of *kɔɾɔ* 'fog, mist' and *pi* 'rain'

b) *tu**β**-ʌ* 'he/she helps'
compound of *tup* 'help' and -ʌ PRS.NEUTRAL.DECL suffix

(5) j_V

a) *tɛj**β**ʌm* 'big tiger'
compound of *tɛj* 'big' and *pʌm* 'tiger'

b) *mej**β**as* 'remove clothing from one shoulder (as a sign of respect)'
compound of *mej* 'carry on the shoulder' and *pas* 'take off'

(6) ɾ_V

a) *kɨɾ-**β**aɾ* ‘letter’
combination *kɨɾ* ‘writing’ and nominal suffix *-paɾ*

b) *maɾ**β**am* ‘water chestnut’
compound of *maɾ* ‘water chestnut’ and *pam* ‘chestnut’

(7) z_V

uzβɨ ‘funny’
combination of *uz* ‘laugh’ and *-pɨ/βɨ/pɔ/βɔ*, a postverb used to derive adjectives from process verbs[5]
By 1450 the MK voiced bilabial fricative had lenited and merged with the glide /w/ in the Central dialects. For example, *kɨɾβaɾ* ‘letter’ became *kɨɾwaɾ* and *tʌβʌ* ‘hot (weather)’ became *tʌwʌ*. Before a high front vowel *β* was deleted entirely, such as in *saβi* ‘shrimp’ which became *sai,* and *tʌɾʌβi* ‘dirty’ which became *tʌɾʌi* (Lee and Ramsey 2011:139).

At the same time in the 14th century that *β* developed, *s* also underwent voicing in voiced environments in the Central dialects. The MK voiced alveolar fricative *z* alternated allophonically with *s* in MK, where *z* occurred only in voiced environments. Although the orthography includes words with a *z* coda (e.g. *uz* ‘laugh’), by MK all word-final apical consonants were neutralized to [t], which has been maintained by all of the Korean dialects and Jejueo. The MK alveolar voiced fricative occurred in voiced environments following and preceding voiced segments, such as V_V, j_V, ɾ_V[6], n_V, m_V, V_β, and V_ ɣ, as in examples 8-14. The alveolar voiced fricative also occurred in word-initial position in a small set of

[5] Lee and Ramsey (2011:138) write that the *-pɨ* postverb “…varies with the shape of the stem to which it attaches, the bilabial fricative /β/ 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.”

[6] The deletion of *ɾ* before an alveolar consonant in MK is well documented, and the result is that in compounds such as examples 10a and 10b, *ɾ* is deleted (Lee and Ramsey 2011:141).

ideophones, which included *zʌɾzʌɾ* ‘the appearance of flowing water’ and *zʌmzʌm* ‘the shimmering heat of the sun’ (Lee and Ramsey 2011:140).

(8) V_V
a) *azɔ* ‘younger brother’
b) *nʌzi* ‘bustard (bird)’

(9) j_V *sɛjzam* ‘dodder, love vine.’

(10) ɾ_V
a) *tuzʌ* ‘a couple’
compound of *tuɾ* ‘two’ and *sʌ* ‘three’
b) *pʰɨzʌɾi* ‘land overgrown with weeds’
compound of *pʰɨɾ* ‘grass’ and *sʌɾi* ‘space’

(11) n_V
a) *hanzum* ‘sigh’
compound of *han* ‘one’ and *sum* ‘breath’
b) *hanzam* ‘creeper, vine’

(12) m_V *momzo* ‘a person’

(13) V_β *uzβɨ* ‘funny’

(14) V_ ɣ *kɔzɣɛ* ‘scissors’

According to the written record, *z* disappeared completely between 1470 and 1600 in the Central dialects. For example, MK *kɔzɣɛ* ‘scissors’ became *kawi* in the Central dialects. In the southern dialects and Jejueo, *kasɛ* ‘scissors’ retained the proposed earlier MK word-medial **s*.

In addition to *β* and *z*, the third voiced fricative in MK was the voiced velar fricative *ɣ*. Its occurrences in the textual record are often difficult to establish because the graphic representation of *ɣ* in MK was ○, which also served as the ‘zero consonant’ in a syllable without an onset, much as ㅇ does in Korean orthography today. The voiced velar fricative allophone *ɣ* occurred in voiced environments, such as: ɾ _V, z_V, and i,j_V, as in examples 15-

17. In the modern dialects outside of the central region, where *p*, *s* and *k* are preserved, lenition did not occur. In the modern southern Hamgyeong dialect, MK *mʌɾɣwi* ‘wild grapes’ is *mʌɾki*, and MK *moɾɣɛ* ‘sand’ is *moɾkɛ*.

(15) ɾ _V

(a) *moɾɣɛ* ‘sand’

(b) *noɾɣɛ* ‘song’

(16) z_V

(a) *kɔzɣɛ* ‘scissors’

(b) *uzɣi* ‘make laugh’

(17) i,j_V

(a) *pɔiɣɛ* ‘Pear Inlet (place name)’

(b) *kɔɾɛɣoɾ* ‘Walnut Village (place name)’

By the late 1500’s, textual representation of the voiced velar fricative had disappeared. For example, the spellings of inflected verbs that contained *k*-initial suffixes like *oɾ-ɣa* ‘go up’ and *taɾ-ɣa* ‘is different’ were spelled *oɾ-ɾa* and *taɾ-ɾa,* respectively, in the 1587 *Sohakonhae* (Lee and Ramsey 2011:149), where the fricative had changed to *ɾ* following an *ɾ*.

Nasal distribution was relatively unrestricted in this period, and the labial and alveolar nasals occurred freely in almost all phonological environments. Unlike the Central modern dialects, in the MK period /n/ often preceded a high front vowel or glide, as in *ni* ‘tooth’ and *njʌɾɨm* ‘summer’ (Lee and Ramsey 2011:150).

It is rare to find words written in the 15th century with a tense stop. During the MK period lenis stops /p t k tɕ/ were tensed [p͈ t͈ k͈ t͈ɕ] as the result of sandhi with a preceding consonant such as *ɾ, s* or stop, as in *hoɾ* ***k͈****ʌs* ‘single thing’ (Sohn 2015:5). Tensing regularly occurred in medial position.

Some of the modern Korean dialects have developed phonemic vowel length (see

chapter 4), but MK had only short vowels, as shown in the following system in Table 3.

Front	Central	Back
A. Vowels		
i	ɨ	u
	ʌ	o
	a	ɔ[7]

Table 3. Middle Korean vowel phonemes

With glides /j/ and /w/, MK formed 18 diphthongs and triphthongs, given in Table 4 below. Unlike in the modern dialects of Korean, where /j/ occurs only as an on-glide, MK /j/ occurred as an off-glide as well, as in *njʌj* 'old times' (Sohn 2015:5).

Front	Central	Back
On-glides	*jʌ ja* *wʌ wa*	*ju jo jɔ*
Off-glides *ɨj*	*aj ʌj*	*uj oj*
On-off glides	*jaj jʌj* *waj wʌj*	*juj joj*

Table 4. Middle Korean diphthongs and triphthongs

MK had vowel harmony, grouping vowels according "yang" (lower), "yin" (higher) and "neutral" (*i*) as shown below in Table 5. Vowel harmony has been maintained to greater or lesser degrees in the modern Korean dialects and more strictly in Jejueo, as will be discussed in chapters 4 and 5. In MK the yang vowels *ɔ, o,* and *a* occurred only with yang vowels or the neutral *i* vowel, and the yin vowels *ɨ, u, ʌ* occurred only with yin vowels or the neutral *i* vowel. The neutral *i* vowel could occur either with yang vowels, as in *api* 'father,' where *a* is yang, or with yin vowels, as in *ʌmi* 'mother,' where *ʌ* is yin (Lee and Ramsey 2011:162).

[7] I interpret the low back round vowel *arae a* as IPA [ɔ], following Lee and Ramsey's notation for the shape of this vowel in the 13th century (2011:95). The *arae a* vowel in modern Jejueo is also understood to be [ɔ].

Yang	Yin	Neutral
ɔ o a	ɨ u ʌ	i

Table 5. Middle Korean vowel harmony

Vowel harmony also applied to suffixes, which, to greater or lesser degrees, is still the case in the modern Korean dialects and Jejueo. Many suffixes in MK, both case suffixes and verbal suffixes, alternate between pairs of yin and yang vowels. For example, the MK accusative suffix had the shape [ɔɾ] after yang vowels, as in *saɾom-ɔɾ* 'person-ACC', and the shape [ɨɾ] after yin vowels, as in *njʌɾɨm-ɨɾ* 'summer-ACC'. The MK locative case suffix had alternating shapes [aj] and [ʌj] when attached to yang versus yin stems, as in the yang phrase, *paɾɔɾ-aj* sea-LOC 'in the sea' and the yin phrase, *njʌɾɨm-ʌj* summer-LOC 'in the summer' (Lee and Ramsey 2011:162).

If the suffixal morpheme began with a consonant, vowel harmony was blocked. This is apparent in phrases where *-man* 'only' is suffixed to yin stems without alternating vowel height, as in *kʌs-man* 'only (the thing) that…' (Lee and Ramsey 2011:162). Similarly, the progressive aspect suffix *-ko* attached to both yin and yang stems without changing shape.

MK had a three-way tonal distinction, which was marked lexically with diacritics in documents dating from this period. The tonal system consisted of low tone ("even tone"), high tone ("departing tone") and rising tone. These are marked with dot diacritics. According to Lee and Ramsey, "…no marking on a syllable was pronounced with a low pitch; one dot marked a high pitch; and two dots marked a long, rising pitch." Some examples of the tonal system are in Table 6 below.

low	high	rising
sòn ‘guest’	*són* ‘hand’	*pǎɾ* ‘bamboo blind’
pì ‘stele’	*pí* ‘rain’	*sǒɾ* ‘brush’
	páɾ ‘foot’	
	sóɾ ‘pine’	

Table 6. Examples of three-way tonal distinction in MK
Adapted from Lee and Ramsey 2011:163

Already by 1400 CE Korean began to lose this tonal system, as indicated by the fact that tones are marked inconsistently on lexical items in later documents. As we will see in chapter 4, by the early Modern Korean period (1600-) phonemic tone was lost in the Central dialects (Sohn 2015:14), but tonal systems based on the MK system remain in both the Hamgyeong dialect in the Northeast and the Gyeongsan dialect in the Southeast of the Korean peninsula.

3.2 Morphology

Most MK morphology is maintained in all of the modern dialects and in Jejueo, so in this section I will focus on morphological categories that do show significant variation in later developments. Case morphology varies widely across the modern dialects and Jejueo. In some instances, case morphemes may be omitted altogether, and the omission of nominative and accusative suffixes was frequent in MK, particularly before adjectives and intransitive verbs (Lee and Ramsey 2011:229), as in examples 18 and 19.

(18) *kotɕ tjo -kʰo jʌɾɨm hanɔni*
flower good-CONJ fruit bountiful
‘Its flowers are good and the fruit is bountiful.’ (1447 Yongbi Eocheon ka stanza 2, Lee and Ramsey 2011:229)

(19) *qasjuwɾa -nɔn aɾ pska nanɔna-ɾa*
Asura -TOP egg break birth -SE
‘Breaking the egg, Asura was born.’ (1447 Seokpo sangjeol 13:10a, Lee and Ramsey 2011:229)

The MK nominative suffix was *-i* and the MK accusative suffix was *-ɨl/-lɨl,* depending

on whether it followed a consonant or vowel (Sohn 2015:3). As we have seen, the vowel height of these vowel-initial suffixes was subject to vowel harmony with the vowel of the preceding stem. A second nominative suffix, *-ka*, was attested in the written record from 1572, in a poem by Cheong Cheol. From this point on, the nominative suffix *-i* attached to consonant-final stems, e.g., *salɔm-**i*** person-NOM, and the nominative suffix *-ka* attached to vowel-final stems, as in *pɔi-**ka*** 'my stomach' (Cheong Cheol 1572, Lee and Ramsey 2011:187). As we will see in chapters 4 and 5, the distribution of *-i* and *-ka* as nominative suffixes following consonants and vowels, respectively, is maintained by the Central Korean dialects and Jejueo.

The case suffixes in MK are shown in Table 7 below. All of these suffixes have been maintained by the modern dialects of Korean, although they have undergone sound changes. For example, the MK inanimate locative suffix *-(j)ʌj/ɛj* is *-e* in the modern Korean dialects. Other suffixes, like the formal animate/inanimate genitive *-s*, are maintained in some compounds across the modern Korean dialects and Jejueo, in constructions meaning a second nominal belonging to a first nominal such as MK *pʰi**ɾ**snip* 'blade of grass' (grass-GEN-leaf). (Lee and Ramsey 2011:145). Jejueo, on the other hand, has innovated many grammatical suffixes as well, as will be discussed in 4.1.

Nominative	*-i/j*
Genitive	*-s* [after honorific or inanimate nominal] *-ɨj/-ɔj* [after nonhonorific animate nominal]
Accusative	*-(ɾ)ɨɾ/-(ɾ)ɔɾ*
Topic	*-nɔn/-nɨn/-ɔn/-ɨn/-n, -(i)ɾ(ɾ)an* 'as for'
Goal/dative/static Animate locative 'to, at, in' Inanimate	*-skʌj/-skɨj* [honorific] *-(ɨ/ɔ)jkʌj/-jkʌj* [neutral] *-(j)ʌj/ɛj*
Source/dynamic locative Animate 'from, at, in' Inanimate	*-skʌjsjʌ/-skɨjsjʌ* [honorific] *-(ɨ/ɔ)jkʌjsjʌ, -sontɔj* [neutral] *-(j)ʌjsjʌ/-ajsjʌ*
Instrument/directional	*-(ɨ/ɔ)ɾo*
Comitative 'with'	*-(k)wa*
Connective 'and'	*-(k)wa;-(i)mjɔ; -(i)ɾaŋ*
Comparative 'than'	*-ɾawa; -tukon/-tukun/-tokon*
Ablative 'from'	*-pɨtʰʌ; -(ɨ/ɔ)ɾosjʌ*
Vocative	*-ha* [honorific] *-(j)a/-(i)jʌ* [exclamatory]

Table 7. Middle Korean case suffixes Adapted from Sohn (2015:7)

New words in MK were formed via affixation. While prefixing and suffixing were both productive processes, only suffixes could change word classes, e.g. nominalization (Sohn 2015:6). As Sohn explains about the morphological development of late Middle Korean words from both native Korean and borrowed Chinese sources,

> [Late Middle Korean] inherited the [Early Middle Korean] native stock and derived many new words through compounding, derivational affixation, grammaticalization, or lexicalization. Unlike [borrowed Chinese] words which were essentially nominal and a small number of adverbs, the native stock covered all word classes including nouns, pronouns, numerals, verbs, adjectives, the copula, adverbs, determiners, and particles, as well as all kinds of nominal and verbal affixes (Sohn 2015:4).

Some derivational prefixes, derivational suffixes, and non-derivational suffixes are included in Table 8 below. The affixes in Table 8 are all maintained by the modern dialects of Korean and Jejueo.

MK affixes	word example
prefixes *ni-* 'unglutinous' *tɨɾ-* 'wild' *atɕʰɔn-* 'small'	 *ni-psɔɾ* 'unglutinous rice' *tɨɾ-pskaj* 'Perilla japonica' *atɕʰɔn-atɔɾ* 'nephew'
suffixes +WCC *-i* 'activity, state, thing' *-(ɨ)m* 'activity, state, thing' *-kaj/-kej* 'instrument' *-aj/-ej* after l *-ki* 'activity, state'	 *hɔj-tot-i* 'sunrise' *ʌɾ-ɨm* 'ice' *pjʌ-kaj* 'pillow' *ul-ʌj* 'thunder' *mɔɾ-po-ki* (horse-see-) 'easing nature'
suffixes -WCC *-paɾ* 'lines, streaks' *-nim* (honorific) *-atɕi* 'young' *-i* 'animate, thing' *-tɕiɾ* 'activity'	 *pis-paɾ* 'streaks of rain' *atɕɔma-nim* 'aunt' (hon.) *mɔŋ-atɕi* 'foal *koŋtɕak-i* 'peacock' *puɾmu-tɕiɾ* (bellows-) 'blowing with the bellows'

Table 8. Middle Korean derivational affixes

MK had three deictic pronouns, *i* 'this', *kɨ, '*that' and *tjʌ* 'that over there', which are maintained identically or with some phonological changes in the modern dialects of Korean and Jejueo.

3.3 Politeness registers

MK had four speech registers: plain, neutral, moderate respect and deferential. The number of politeness registers varies across the modern dialects and Jejueo, as will be discussed in chapters 4 and 5. In MK the registers were marked by nominal suffixes (Table 10), sentence-final suffixes on verbs, and in the lexicon as closed sets of pronouns and deferential verbs. In MK the honorary suffix *-nim* was not attached to titles as it is in the modern dialects of Korean, but only to kinship terms, e.g. *ʌma-nim* 'mother' and *atɕɔpa-nim* 'father' (Sohn 2015:9).

In MK many case suffixes marked honorific status on nouns, as shown in Table 9. The honorific vocative suffix *-ha* could be used when addressing a person with higher social status, and the plain vocative suffix *-a* could be used when addressing an inferior, as in examples 20 and

21 below (Lee and Ramsey 2011:191).

(20) A court minion addressing the king:
ʨʻɛ ŋ -waŋ-ha
big POL-king-VOC.HON
'O, Great King.'

(21) A high-ranking court official addressing the king:
ʨʻɛ ŋ -waŋ-a
big POL-king-VOC.PLN
'O, King.' (Lee and Ramsey 2011:191)

A third vocative, *-ja*, had an exclamatory feature, and was used to call to others in the lowest politeness register. The formal vocative case suffix *-ha* disappeared from use, but the plain vocative, *-a*, suffixes to consonant-final animate NPs and *-ja* attaches to vowel-final animate NPs in all of the modern dialects and Jejueo, as in *Soyeon-a* 'Soyeon(name)-VOC' and *Minsu-ya* 'Minsu(name)-VOC'. This modern vocative suffix confers an intimate tone.

	Genitive	Locative-allative	Dative	Vocative
plain	*-ɔj/-ɨj*	*-ŋʌj* inanimate	*-ɔjkej, -ɔjkɨŋej, -ɔjkʌkɨj, -ɔjsontoj*	*-a*
formal	*-s*		*-skʌj/-skɨj*	*-ha*

Table 9. Middle Korean plain and formal case suffixes

In MK dative suffixes were the semantic equivalents of locative-allative suffixes used with animate nouns. Dative was marked either for plain or honorific status. The suffix attached to plain animate nouns was a combination of the plain genitive suffix *-ɔj/-ɨj* plus *-kej*, *-kɨŋej*, *-kʌkɨj* *-sontoj*, as in examples 22-25 (Lee and Ramsey 2011:189). It is not known whether the four plain dative suffixes had any difference in semantic features, but the development of four separate suffixes may be the result of differing clines of grammaticalization. It is possible that distal demonstrative *kɨ* and the genitive suffix *ɔj/-ɨj* developed into the dative suffixal variants *-kej, -kɨŋej,* and *-kʌkɨj.* The dative suffix *sontoj,* on the other hand, is known to be a grammaticalization of two separate nouns, *son-toj* 'one place', which grammaticalized in a manner parallel to the

later development of the modern Korean dative suffix, *-hante,* originally *hɔn-toj* ‘one place’.

(22) *qaɾahan-ɔjkej*
qarahan-DAT
‘to the Arahan’ (1459 *Weorin Seokpo* 9:35c)

(23) *nɔm-ɔjkɨŋej*
person-DAT
‘to a person’ (1447 *Seokpo Sangjeol* 6:5a)

(24) *qaɾahan-ɨjkʌkɨj*
qarahan-DAT
‘to the Arahan’ (1459 *Weorin Seokpo* 9:35c)

(25) *s͈juṭaɾq-ɔjsontoj*
s͈juṭaɾq-DAT
‘to Sudatta’ (1447 *Seokpo Sangjeol* 6:15b)

Nouns with higher status added honorific genitive suffixes *-s* to *kej, -kɨŋej, or -kʌkɨj,* as shown in examples 26-28. The MK formal genitive *-s* is maintained, but is not productive, in noun compounds in the modern Korean dialects and Jejueo, as will be discussed in 5.2. The initial consonant cluster created by combining genitive *-s* and *-kej* developed into the dative suffix attached to honored nouns in the modern Korean dialects *-k͈e*, when initial clusters developed into tense consonants (see 3.2 in this chapter).

(26) *ŋwaŋ-skɨŋej*
king-DAT
‘to the king’ (1459 *Weorin Seokpo* 7:26)

(27) *tjʌk -ṯɛɔ -skɨj*
direct-descendant-DAT
‘to the rightful heir of the throne’ (1447 *Yongbi Eocheon Ka* stanza 98)

(28) *zjʌloj -skʌkɨj*
Buddha-DAT
‘to the Buddha’ (1459 *Weorin Seokpo* 10:69)

Sentence-final mood suffixes interacted with speech styles in MK, which had a four-level system of politeness, as shown in Table 10 (Ko 2007:303–7). These suffixes attached to

verbs sentence-finally, as in the morphological structure of the modern Korean dialects and Jejueo. In the declarative mood, the morpheme *-ŋ* marked addressee politeness, both for moderate respect: *-ŋ* and for deferential *-ŋi* as shown in examples 29 and 30 below (Lee and Ramsey 2011:209). Example 29 is an excerpt from a conversation between nobles of equal status, and 30 shows a merchant addressing the Buddha (Lee and Ramsey 2011:209-210).

(29) *put^{h}je -si -ta hɔnɔni-**ŋ** -ta*
Buddha-EXIST.HON-DECL god -POL-DECL
'…he is the Buddha.' (1447 *Seokpo Sangjeol* 6:18a)

(30) *nɛ ʌru iɾɔzɔβoɾi-ŋi -ta*
I one build -DEF-DECL
'I will build one for you.' (1447 *Seokpo Sangjeol* 6:22a)

Speech style	Declarative	Interrogative	Imperative	Propositive
Plain	*-ta/ɾa*	*-ko/-ka, -njʌ/-njo, -ta*	*-(k)ʌɾa*	*-tɛʌ* (rarely *-tɛʌɾa*)
Neutral	*-ni/-noj*	*-ni*	*-koɾa/-koɾjʌ*	(not attested)
Moderate respect	*-ŋt-a*	*-nɔ-ni-ska/sko*	*-ʌsjʌ/-asjʌ*	(not attested)
Deferential	*-ŋi-ta*	*-nɔ/ni-ŋi-ska/sko*	*-sjosjʌ*	*-sa-ŋi-ta*

Table 10. MK verb-final suffixes marking speech registers and moods

As I will discuss in chapters 4 and 5, many of these verbal endings were maintained in the modern dialects of Korean and Jejueo, although most underwent sound changes, e.g. the plain propositive suffix *-tɛʌ* became *-tɛa* in the modern Korean dialects. Other endings were lost due to the loss of the neutral register in most of the modern dialects.

Aside from the first person singular, pronouns in MK were marked for formality. The MK plural suffix *-tɔlh* attached to general NPs, both animate and inanimate, formal and informal, as in examples 31-32. Although *-tɔlh* underwent sound changes, it is maintained in the modern Korean dialects and Jejueo. The MK suffix *-nɛ* was attached only to animate NPs of high status to mean the esteemed person and other esteemed persons (Lee and Ramsey 2011:174), as in

example 33. The suffix *-nɛ* underwent semantic shift to refer to one's family, then one's home, and now in the modern Korean dialects and Jeju evinces a broader meaning of one's place, e.g., a home or a restaurant, like *Hoji-ne* 'Hoji's place'. Another plural suffix, *-hɨi,* was restricted to suffixing to pronouns, and was used for both plain and polite registers, as in *nʌ-hɨi* 'you-PL', 'you people', and the polite first person plural *tɕʌ-hɨi* 'I(humble)-PL' 'we'. The suffix *-hɨi* has been maintained in the modern dialects and Jejueo.

(31) *ahɔi -tɔlh*
child-PL
'children'

(32) *tɕoŋtɕʰin- tɔlh*
royal clansman-PL
'royal clansmen'

(33) *ʌmʌ -nim -nɛ*
mother-HON-POL.PL
'mothers and other esteemed persons' (Lee and Ramsey 2011:174)

MK had distinct lexical items for politeness, and most of this vocabulary was maintained in the Korean dialects, such as informal existential verb *isi-*, versus polite existential verb *kjesi-*. In MK the honorific suffix *-si* was productive in constructing polite verbs, such as *tɕa-si-ta* 'to sleep (polite)' from *tɕa-ta* 'to sleep', as in example 34. Other honorific words in MK were not etymologically related to their plain counterparts. The inventory of formal content words in MK includes items such as *moj* 'rice', *matɕɔβɔj* 'oldest child', *sɨlha* 'king's meal', *tɨkjʌsita* 'place (something)', *kɔlota* 'say', and *cʌhta* 'fear'.

(34) *tɕɔm tɕa -si -ɾɣtɕe*
sleep sleep-POL-while
'when you sleep' (1449 *Weorin Cheongang Chikok*, stanza 118)

The MK noun *marʂɔm* 'speech, language' is interesting because it underwent historical change separately on the mainland and in Jeju. Until the 17th century *marʂɔm* had the form,

marsom, and in MK it does not seem to have had a polite feature, as can be seen in examples 35-36 below. Today the modern dialects and Jejueo make a distinction between plain *mar* 'speech' and polite *marʂim* 'speech (polite)'. In Jejueo alone, *marʂɔm* is believed to have grammaticalized as the general honorific discourse marker *maʂi,* which is given at the end of an utterance to mark addressee-honorification.

(35) *nara -s marʂɔm-i*
country-GEN speech -NOM
'the country's language' (*Hunmin Cheongeum Eonhae* 1a)

(36) *sjaŋnje -s marsom-ɛ*
everyday-GEN speech -LOC
'in everyday speech' (1517 *Peonyeok Pak Tongsa* 1:14)

3.4 Lexicon

The MK period saw a massive influx of borrowed Sinitic vocabulary, beginning in the 10th century with a series of government reforms, the most influential of which was the Chinese-style civil service exam. Much of the vocabulary was influenced by Chinese education and Buddhism, which also arrived in Korea via China. By the late MK period, through the importation of Confucianism and the popularity of everything Chinese, the number of Chinese borrowings in Korean continued to swell through the Early Modern Period of the 18th century. The changes spread out from content words to function words by the 16th century. According to Lee and Ramsey (2011:236),

> 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 *hɔtaka* '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*.

The Chinese borrowings did not, however, enter all of the Korean dialects and Jejueo in a uniform wave. For example, some speakers of Jejueo use the native Korean numerals mixed

with the Sino-Korean numerals for numbers over 100 (Yang et al. 2019:69), while speakers of the modern Korean dialects appear to exclusively use Sino-Korean for numbers over 100. Other changes that occurred in this timeframe are not found evenly across the Korean dialects and Jejueo. For example, in the 16th century, the form of the common MK verb *mɔiŋkɔl* 'make' was replaced by *mɔintɔl/mɔntɔl* in the northern and central dialects, but the southern dialects and Jejueo continue to use the earlier variant containing a velar stop, e.g., Jejueo *meŋkɨɾta* 'make'.

3.5 Summary

In this chapter I have highlighted some of the phonological, morphological and lexical features of MK, spoken around the capital of Korea from the 10th century to the end of the 16th century, which evolved differently across the modern Korean dialects and Jejueo. I have also discussed features of the modern dialects and Jejueo that were absent from Korean during the MK period, such as phonemic vowel length and robust palatalization, which developed later in some of the Korean dialects and Jejueo, as we will see in chapters 4 and 5. In the following two chapters we will see how the modern dialects of Korean and Jejueo differently maintained or lost these MK features, and which features the dialects and Jejueo have innovated since the MK period.

Chapter 4

Retentions and Innovations in the Modern Dialects of Korean

Because Korea is mountainous, the language divided naturally into different dialects according to topography. Although most scholars agree on six regional dialects in Korea, I have argued above in Chapter 1 that Jejueo is, in fact, a second Koreanic language and not a dialect of Korean. The five dialectal regions of Korea are: Northwestern (Pyeongan province), Northeastern (Hamgyeong province), Central (Gyeonggi, Hwanghae, Gangwon, and Chungcheong provinces), Southwestern (Jeolla province) and Southeastern (Gyeongsang province). These five dialectal boundaries are outlined in Figure 2 below. Each of the five dialects is divided further into northern and southern regions of the provinces, which often correspond to more granular dialectal differences.



Figure 4. Map of Modern Korean dialects

Causes for the formation of dialectal zones were also political. As we saw in Chapter 2, Jeju Island had a tributary relationship with the mainland since 477 CE, during the Three Kingdoms period (37 BCE-668 CE). In the last two centuries of the Joseon period (1392-1910) Jeju residents were banned from leaving Jeju Island to avoid financial loss for the Korean administration in the capital. This political action reinforced the separate development of Jejueo and Korean. On the Korean mainland, there was no major transportation connecting the Jeolla province in the Southwest and the Gyeongsang province in the Southeast. This manifested in great differences between the dialects. During the Three Kingdoms period Jeolla and Gyeongsang were part of the Baekje and Silla Kingdoms, respectively, and Jeju Island was considered part of the Baekje Kingdom.

Similarly, the demarcation between the Hamgyeong Province and the Central Provinces was historically political, not geographic. According to Sohn (1999:59),

> During the Goryeo and Joseon dynasties, the area between Cheongpyeong in the Hamgyeong Zone and Yeongheung in the Central Zone was a place of constant battle between the Manchu tribes (Jurchen) in the north and the Koreans in the south. After the Manchu tribes were driven away to the north during the Joseon dynasty, Pyeongan Province was inhabited by people from the neighboring Hwanghae Province, and Hamgyeong Province was settled mainly by people from Gyeongsang Province in the south. This is the reason for the similarity between the Pyeongan dialect and the Central dialect, on one hand, and between the Hamgyeong dialect and the Gyeongsang dialect on the other. While influencing each other, the two northern dialects have constantly been influenced by Chinese, Tungus, Jurchen, and Russian, a fact responsible for the maturation of the Pyeongan and Hamgyeong dialects.

In the next sections I discuss varying developments in the five different dialectal regions, and which features of MK were maintained by different dialects.

4.1 Northwest: Pyeongan dialect

In this section I will describe relevant developments from MK to Pyeongan phonology (4.1.1) and morphology (4.1.2).



Figure 5. Pyeongan Province

4.1.1 Phonology

The modern Pyeongan inventory of consonant phonemes differs from the consonant phonemes of MK because in the Pyeongan dialect the MK voiced fricatives /β/ and /z/ were lost, but intervocalic /k/ never underwent frication in voiced environments and remained /k/ and was not deleted. An example of this is *kɛkurtɕʰaŋ* 'brook' (MK *kɛɣor*) (Ahn and Yeon 2020:65). The consonant phonemes shown in Table 11 are identical in all of the modern Korean dialects and Jejueo.

	Bilabial	Alveolar	Palatal	Velar	Glottal
Plosive: lax	p [p,b]	t [t,d]	tɕ [tɕ, dʑ]	k [k,g]	
Aspirated	pʰ	tʰ	tɕʰ	kʰ	
Tense	p̬	t̬	t̬ɕ	k̬	
Voiceless: lax		s			h
Voiceless: tense		s̬			
Nasal:	m	n		ŋ	
Liquid:		ɾ [ɾ,l]			
Glide	w		j		

Table 11. Pyeongan dialect consonant phonemes

The Pyeongan dialect is distinct from the other modern dialects and from Jejueo in that it has not undergone palatalization of any kind, even the palatalization of the series of alveolar stops /t tʰ t̬/ to palatoalveolar [tɕ tɕʰ t̬ɕ] before a high front vowel or glide, which occurred quite

early after the MK period in the other dialects, spreading north from Gyeongsang and Jeolla in the 17th century (Ahn and Yeon 2020:65, Kim 1988). Palatalization occurred in both native Korean and Sino-Korean words. While MK allowed an initial alveolar stop followed by a /j/ glide, none of the modern Korean dialects or Jejueo allow this initial cluster. However, Pyeongan was the only dialect that dropped the /j/, whereas in all the other Korean dialects and Jejueo the /j/ was co-articulated with the initial alveolar stop, palatalizing it. Some examples of Pyeongan's maintenance of the alveolar stop before an originally high front vowel or glide are *totʰijo* 'it's good' (MK *tjoh(ta)*; other modern dialects *tɕotɕʰijo*) (Lee and Ramsey 2011:323) and *tʌɾ* 'temple', which was *tjʌɾ* in MK and became *tɕʌɾ* in the other dialects (Lee and Ramsey 2000:323).

The Pyeongan dialect is also different from other dialects and Jejueo in that it maintains *n* and *ɾ* before a high front vowel or glide. Word-initial palatalized pronunciations of /n/ are not permitted in the other dialects and so the consonants /n/ and /ɾ/ drop in this position (Lee and Ramsey 2000:322). In the other dialects this phonological change occurred fairly early after the MK period, but the Pyeongan dialect did not undergo this change. The initial consonant *ɾ* in Sino-Korean words was replaced by *n*. Examples of this phenomenon are MK *ni* 'tooth', which is *ni* in Pyeongan and *i* in the other Korean dialects, MK *njʌɾɨm* 'summer', which is *nʌɾɨm* in the Pyeongan dialect and *jʌɾɨm* in the other Korean dialects, and MK *njʌtɕa* 'woman', which is *nʌtɕa/njʌtɕa* in the Pyeongan dialect and *jʌtɕa* in the other Korean dialects (Lee and Ramsey 2000:323). Examples of the change of word-initial *ɾ* to *n* before a high front vowel or glide in the Pyeongan dialect are Chinese loanwords in MK, *ɾjaŋsim* 'conscience', which is *naŋsim* in the Pyeongan dialect and *jaŋsim* in the other Korean dialects, and MK *ɾjoɾi* 'cooking/dish', which is *noɾi* in the Pyeongan dialect and *joɾi* in the other Korean dialects (Ahn and Yeon 2020:65).

The vowel inventory in Table 12 below shows Pyeongan's eight-vowel system. Outside of Jeju Island, in the 16th century the low back rounded vowel /ɔ/ began merging with /u/ in non-initial syllables and by the second half of the 18th century it was lost in initial syllables as well (Sohn 2012:13, Lee and Ramsey 2011:262). The vowels /e/ and /ɛ/ formed in all of the dialects and Jejueo from the MK diphthongs *ʌi* and *ai* (Ahn and Yeon 2020:65).

The Pyeongan dialect, like the other modern Korean dialects, did not maintain the MK system of yin, yang and neutral vowel harmony. The Pyeongan dialect, unlike most other dialects, does not change the shape of the infinitival vowel *ʌ/a* depending on the height of the preceding vowel in the root. In Pyeongan the infinitival vowel is consistently /a/, e.g. *kanɨɾ**a**sʌ* 'because it was flimsy', which is *kanɨɾʌsʌ* in other modern Korean dialects (King 2006:268). The vowel phonemic inventory of the Pyeongan dialect is shown in Table 12 below.

Front	Central	Back
Vowels		
i	ɨ	u
e	ʌ	o
ɛ	a [a,ã:]	

Table 12. Vowel phonemes of Pyeongan dialect

The Pyeongan dialect has ten diphthongs /je jʌ ja ju jo wi we wɛ wʌ wa/ (Ahn and Yeon 2020:65). Unlike MK, Pyeongan has no phonemic offglides and no triphthongs. The MK diphthongs with glides as onsets (/j/V, /w/V) lost their glides after onsets /n ɾ s tɕ tɕʰ/ in the Pyeongan dialect. Glides are also deleted following a consonant and preceding /ʌ/ in Pyeongan, such as Sino-Korean *mjʌŋɾʌŋ* 'order', which becomes *meŋnʌŋ* in the Pyeongan dialect, and MK *pjʌ* 'rice plant', which becomes *pe* in the Pyeongan dialect (King 2006:268).

4.1.2 Morphology

I am only including information about dialectal morphology that is useful for tracing the diachronic development of grammatical morphology in MK to the modern dialects of Korean and Jejueo. In the case of the Pyeongan dialect, the history of its grammatical development is largely unwritten, but in this section I have noted where the synchronic morphology of Pyeongan overlaps with that of other modern dialects and Jejueo. In addition to the MK subject marker *-i,* which was maintained in all of the Korean dialects and Jejueo, Pyeongan has an innovative subject marker, *-ɾɛ/-ɾe,* which follows stems ending in vowels. This nominative suffix can also be found in the Hwanghae dialect just south of Pyeongan, and in Jejueo, but it is not attested in the written history of MK. Until the early modern period, nominative suffixes continued to evolve. Perhaps when *-ka* developed in the 17th century as the nominative marker which follows vowel-final stems in the Central dialects, the suffix *-re*, as a vowel-final nominative suffix, had developed in some of the peripheral areas of Korea. In the Pyeongan dialect sentence *nɛ-ɾe kɨɾesio* 'I did it', the Pyeongan subject marker is attached to the first-person singular pronoun. The *-i* nominative marker attaches to consonant-final nominals in the Pyeongan dialect, such as in *sojʌn-i kɨɾesio* 'Soyeon did it.'

The Pyeongan dialect has three politeness registers, polite, intimate/familiar and plain, having lost the fourth MK deferential register.

4.2 Northeast: Hamgyeong dialects

In this section I will describe relevant developments from MK to Hamgyeong phonology (4.2.1) and morphology (4.2.2).

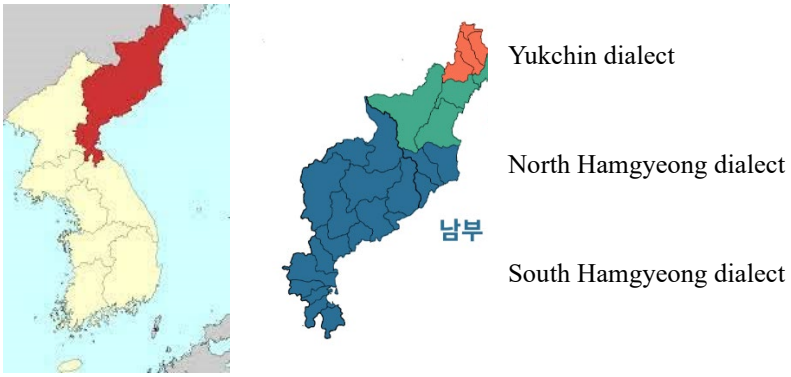


Figure 6. Left: Hamgyeong Province, right: dialectal regions of Hamgyeong Province

4.2.1 Phonology

The Hamgyeong dialectal region is divided into northern and southern areas where some linguistic features differ, as with the other Korean dialects. However, the Hamgyeong dialectal area also contains the Yukchin region, which lies in a contact area with the Yanbian autonomous Korean prefecture of China and which has some significant changes which differentiate it from both northern and southern Hamgyeong dialects. The dialect of this northeast region of Hamgyeong is referred to as the Yukchin dialect and is alternately treated by scholars as one of the Hamgyeong dialects and as an independent dialect. Here I categorize the Yukchin dialect as among the Hamgyeong dialects but note where linguistic features diverge from either Northern Hamyeong dialect, Southern Hamgyeong, or both.

The Hamgyeong dialects share a consonant phoneme inventory with the other modern dialects and Jejueo (see 4.1.1). In the Hamgyeong dialects, the earlier MK intervocalic stops */p s k/ were maintained, as in words such as *tɕʰi**p**i* ‘cold’ (MK *tɕʰi**β**ʌ*) and *taɾ**p**i* ‘leg’ (MK *taɾ**β**i*), *ku**s**i* ‘manger’ (MK *ku**z**i*), *na**s**i* ‘shepherd’s purse (plant)’ (MK *na**z**i*) (King 2006:271), *kɨɾki* ‘swing’ (MK *kɨɾɣi*), and *uɾkita* ‘ring’ (MK *uɾɣita*) (Ahn and Yeon 2020:63).

Unlike the Pyeongan dialect, the northern and southern Hamgyeong dialects have robust palatalization for /t k/ before a high front vowel or glide. Examples include t-palatalization in

tɕʰʌɾɨ ‘alike’ from MK *tʰjeɾo* and k-palatalization in *tɕiɾɨmi* ‘oil’ (MK *kiɾɨm*) and *tɕiɾi* ‘street’ (MK *kiɾh*) and (Ahn and Yeon 2020:63, National Institute of Korean, Wordrow 2022). The glottal fricative /h/ is reported to change to an alveolar place of articulation before a high front vowel or glide. This is evident in words like *seŋnim* ‘older brother’ from MK *hjʌŋnim*, and *suŋnjʌn* ‘bad harvest year’ from MK *hjʌmnjʌn* (Ahn and Yeon 2020:63), where */hj/ turns into /s/. The palatalization occurred before the glides were lost in words like *tɕʰʌɾɨ* ‘alike’ and *seŋnim* ‘older brother’.

Another innovation in the Hamgyeong dialects is the sound change of a flap /ɾ/ to a trilled [r]. King (2006: 271) states that this change, except before another /ɾ/, occurs in all positions of a word, e.g., *iɾutɕuk* ‘early’ (MK *iɾtɕɨk*), *tarki* ‘chicken’ (MK *tɔɾk*), *mar* ‘speech’ (MK *maɾ̬ɔm*), *ar* ‘egg’ (MK *aɾh*), and *ramjʌn* (MK *ɾamian*). When /ɾ/ appears before a second /ɾ/ word-medially (this cluster is only permitted word-medially), the allophone [l] is used for both, as is the case with all of the other modern dialects and Jejueo, as in *sʌɾɾʌŋtʰaŋ* [sʌllʌŋtʰaŋ] ‘bone soup’ and *p̬aɾɾi* [p̬alli] ‘quickly’.

The Yukchin dialect within the Hamgyeong dialect group exhibits some phonological differences from the northern and southern Hamgyeong dialects, and forms something of a dialect island where changes that occurred elsewhere in Hamgyeong didn’t reach. Many older speakers in the Yukchin region do not palatalize the initial consonants of certain words (Ahn and Sohn 2020:63). Words in the Yukchin dialect such as *tjotʰa* ‘good’ share an initial consonant with the Pyeongan dialect (*tohta*, MK *t̬johɔta* ‘good’), not with the other Hamgyeong dialects where the initial /t/ palatalized to become /tɕ/ (Hamgyeong *tɕota* ‘good’).

Like MK and the Pyeongan dialect, the Yukchin dialect allows word-initial nasals to precede high front vowels and glides, as in *niputɕaɾi* ‘bedding’ (MK *nipɨɾ*).

Perhaps due to the relatively more limited documentation of the Hamgyeong dialects compared to other modern Korean dialects (King 2006), the Hamgyeong vowel inventory continues to be debated amongst scholars. As shown in Table 13 Ramsey (1978:58) presents a ten-vowel system for Hamgyeong with 11 diphthongs, which only occur syllable-initially (/je jɛ jʌ ja ju jo wi we wɛ wʌ wa/) (Ahn and Yeon 2020:62).

Front	Central	Back
Vowels		
i	ɨ	u ü
e	ʌ	o ö
ɛ	a	

Table 13 Hamgyeong dialects 10-vowel system

Interestingly, in the Hamgyeong dialects the Middle Korean *arae a* vowel /ɔ/ is realized as [o], rather than /a/, when it follows bilabial consonants, /p p^h p̰ m/. In the other modern Korean dialects the /ɔ/ merged with /a/ or /ʌ/ in this environment, and in Jejueo, the *arae a* is maintained as [ɔ]. Some examples of this phenomenon in Hamgyeong are *poɾɨm* "wind" (MK and Jejueo *pɔɾɨm*, MSK *paɾam*) and *moɾ* "horse" (MK and Jejueo *mɔɾ* and MSK *maɾ*) (Ahn and Yeon 2020:63).

Umlaut is robust in the Hamgyeong dialects, and particularly in the North, perhaps because until recently the northern Hamgyeong dialects had only the front vowel /i/ for the nominative marker rather than alternation between *-i* NOM following consonants and *-ka* NOM following vowels, as in other Korean dialects (Ahn and Yeon 2020:62). An earlier form of Hamgyeong also included *-i* in the citation forms of many nouns (King 2006:271). When a high front vowel, such as the nominative marker, *-i* follows /ɨ/ after /s/, /tɕ/ or /$tɕ^h$/ (with or without an intervening liquid), umlaut is triggered, fronting the /ɨ/ to [i] (King 2006:271). This change has become lexicalized in words such as in *mjʌ$tɕ^h$il* 'some days', which is *mjʌ$tɕ^h$ɨl* in the Yukchin

dialect. Ahn and Yeon (2020:63) also state that the vowels /a ʌ u/ are fronted in this environment, but the shapes of the fronted vowels are not given. In southern Hamgyeong, /a ʌ u o ɨ/ are fronted to /ɛ e y ø i/, respectively, when followed by a sequence of a non-coronal consonant and a high front vowel or glide, which is lexicalized in some cases, as in Hamgyeong words like *koiki* 'meat' (MK *koki*) (Yeon 2012:172).

The two principal areas where a pitch accent system developed from the tonal system of MK are Hamgyeong Province in the Northeast of the Korean peninsula and Gyeongsang Province in the Southeast. In the Hamgyeong dialects, pitch patterns are determined by the location of an accent. Unless the first syllable of a word is accented, pitch begins low, then rises towards the accented syllable as a target, which is pronounced with a higher pitch and more intensity (Lee and Ramsey 2011: 165). Pitch falls immediately following the accented syllable, staying low to the end of the word. If the accent occurs on the last syllable, or if a word has no accent, they are pronounced identically, with rising pitch that trails off word-finally. In this way words are distinguished by contrasting pitch, rather than by tones on individual syllables. Thus, in the Hamgyeong dialects, monosyllabic words do not have contrasting pitch when produced alone. When monosyllabic words are produced followed by another word, however, the assigned pitch accent is apparent. In examples (37) and (38) below, *pe* 'pear' and *pe* 'belly' are homonyms when produced in isolation, but carry a different pitch accent when followed by a nominative suffix (Lee and Ramsey 2011:165).

(37)	(38)
L-H	H-L
pè-ká	*pé-kà*
pear-NOM	belly-NOM
'pear'	'belly'

Like the other two Hamgyeong dialects, the Yukchin dialect retains distinctive lexical tone from MK. For example, if Yukchin *súrì* is pronounced with a high-low tone it represents 'spoon' and if *sùrí* is pronounced with a low-high tone it represents 'alcohol' (Yeon 2012: 12).

When Middle Korean words are compared with their reflexes in the Hamgyeong dialects, the correspondences between Middle Korean tones and Hamgyeong pitch accents are readily apparent. The Hamgyeong accent (high pitch) occurs on the first syllable that in Middle Korean was marked with a 'departing tone', which was high pitch (Baek 1985). The quality that distinguishes the Middle Korean tonal system from the modern Hamgyeong pitch-accent system is that in Hamgyeong high pitch syllables are phonemically distinct only when followed by a low-pitch syllable (Lee and Ramsey 2011:165).

4.2.2 Morphology

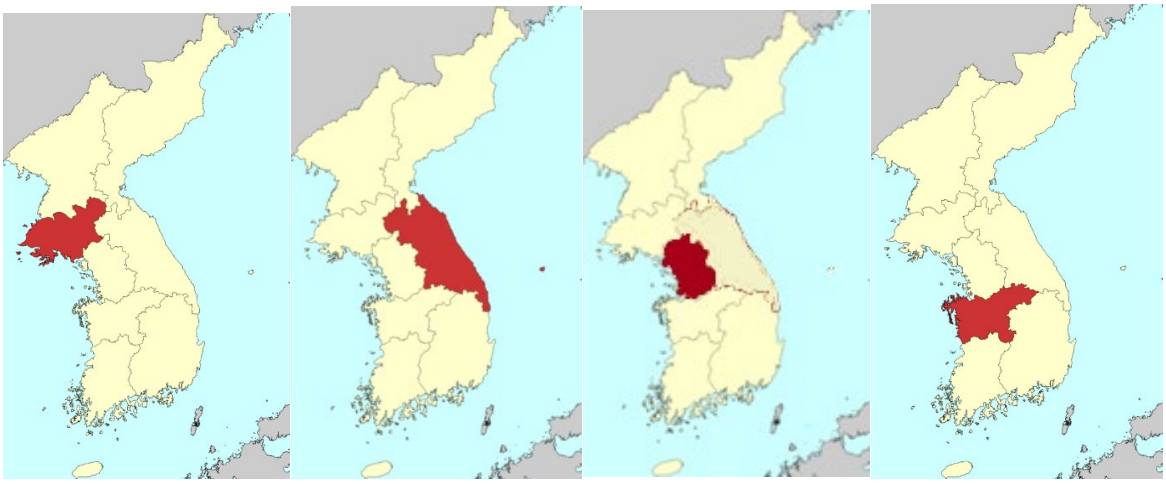
The northern and southern Hamgyeong dialects have innovated some unique suffixes. The nominative markers are *-i*/*-ika* and *-ɾasʌni,* following vowels and consonants, respectively. The Hamgyeong dialects also have a conjunctive/comitative marker *-ka* where the glide from MK has been deleted (MK *-kwa*) (e.g. *yesɨ-ka sɨŋnɛ* 'fox and wolf'). Finally, grammaticalized postpositional particles, such as - *tɕʰʌɾɨ* 'alike' and *-amsaɾa* 'even', also constitute unique grammatical items of the Hamgyeong dialects (Ahn and Yeon 2020:73).

Unlike the northern and southern Hamgyeong dialects, the Yukchin dialect has only one nominative marker, *-i*, which is also added to nouns in citation form. This dialect has the accusative markers *-ɨ/-ɾɨ* retained from MK (MK *-ɨ/ɔɾ /-ɾɨ/ɔɾ*) and the instrumental markers *-ɾi/-iɾi,* which have undergone vowel fronting since MK (MK *-(ɨ/ɔ)ɾo*).

The Hamgyeong dialects have only three politeness levels, having lost the MK neutral register. Many of the mood suffixes appear to be innovations in the Hamgyeong dialects rather than retentions from MK, such as the plain declarative markers *-ɨm/-sɨm* and *-nta* (MK *-ta/-ɾa*). Some suffixes appear to have undergone some semantic shift in their politeness feature such as the MK moderate respect/deferential declarative marker *-ŋt-a* being used as a plain declarative marker in Hamgyeong dialects (*-nta*).

4.3 Central Dialects

In this section I will describe relevant developments from MK to Central dialects phonology (4.3.1) and morphology (4.3.2).



Hwanghae Gangwon Gyeonggi Chungcheon

Figure 7. Maps of provinces that make up Central dialect region

The Central dialect region is comprised of the Hwanghae, Gangwon, Gyeonggi and Chungcheon dialects. Some scholars separate the Chungcheon area into its own dialectal region, but each of the Central dialects shares particular features with some dialects in the group and not others.

4.3.1 Phonology

The Central dialects share a consonant phoneme inventory with the other modern Korean dialects and Jejueo (see 4.1.1). In the Central dialects, MK /β z ɣ/ merged with the obstruents /p s k/ (Ahn and Yeon 2020:66), as in Gyeonggi *sɛ**p**ɛŋi* ‘shrimp’ (MK *sa**β**i*), Chungcheon *jʌ**s**u* ‘fox’ (MK *jʌ**z**ɔ*), and Gyeonggi and Gangwon *moɾ**k**ɛ* (MK *moɾ**ɣ**ɛ*) (National Institute of Korean 2022, Lee and Ramsey 2011:257).

Palatalization is robust in the Central dialects. The most widespread case in this dialectal region is *t*-palatalization. For example, MK *hɔitoti* ‘sunrise’ became *hɛtotɕi* in the Central dialects and MK *kɔthɔi* ‘together’ became *katɕʰi* in the Central dialects. Other types of palatalization are only observed in certain dialects in the group. The velar stop is only palatalized before a high front vowel in the southern Gyeonggi and Chungcheong provinces, e.g. *tɕiɾ* ‘road’ (MK *kiɾh*) and *tɕim* ‘dried laver seaweed’ (MK *kim*). MK initial *h*- changed to *s*- preceding front vowels in some provincial speech within the Hwanghae dialect (Ahn and Yeon 2020:66), such as in *se* ‘tongue’ (MK *hjʌ*) and *sita* ‘count’ (MK *hjeta*), as these changes moved north from the southern dialects in different waves.

An innovation of the Chungcheong dialect is the deletion of the voiceless glottal fricative /h/, where a syllable-initial /h/ is deleted when it follows a syllable-final vowel or velar consonant. An example of h-deletion in the Chungcheong dialect is *ʨ̬ʌkani* ‘pridefully’ from *ʨ̬ʌkhani* (Ahn and Yeon 2020:67).

The Central dialects have robust nasal assimilation, an innovation within this dialect group. Nasal assimilation occurs with obstruents in the final position of noun or verb bases which are followed by a syllable-initial nasal. In this environment, the syllable-final obstruent in

the base is assimilated to the following nasal and realized as [m], [n], or [ŋ], e.g *pat-nɨnta* receive-DECL is realized as [pannɨnta] in the Central dialects (Ahn and Yeon 2020:69).

In the Gyeonggi and Gangwon dialects within the Central dialect group, initial nasal consonants are preceded by an innovative homorganic oral stop. When speakers pronounce some words starting with nasal consonants *n* or *m*, an alveolar consonant [d] or a bilabial consonant [b] matching the place of articulation of *n* and *m*, respectively, is pronounced just before the nasal. Examples of this are the pronunciation of *nuna* 'older sister' as [dnuna] and *musʌun* 'scary' as [bmusʌun] (Ahn and Yeon 2020:66-67). This process can be seen in younger speakers of other dialects and Jejueo due to the prominence of the Seoul dialect as the national standard variety of Korean, which shares this feature with the surrounding Gyeonggi dialect.

Speakers of the Chungcheon dialect assimilate an apical consonant in the coda[8] to the following bilabial or velar consonants—an innovation since the MK period. As in all of the Korean dialects and Jejueo, a geminate obstruent is pronounced as a tense singular obstruent. An example of bilabial assimilation occurs when *pas* [pat] 'field' (MK *pat^h*), attaches to bilabial-initial suffixes like *-putʌ* ABL, and is realized as *pa̤put^{h}ʌm* 'from the field' (Ahn and Yeon 2020:69). Assimilation to a velar consonant is triggered when noun bases ending in apical obstruents precede velar consonant-initial syllables, like *k* or *ŋ*. In this environment the two obstruents merge into a tense velar stop, e.g. the *p* in *misʌp-ke* scare-ADV assimilates to the velar stop and the word is pronounced [misʌk̤e] 'awfully' in the Chungcheon dialect (Ahn and Yeon 2020:69).

[8] In the 17th century consonants *s, s̤, t, t̤, t^h, tɕ, t̤ɕ* and *tɕ^h* neutralized to be pronounced as unreleased [t̚] in the coda unless followed by a sonorant. In that environment, the listed consonants are realized as [t] in all of the modern Korean dialects and Jejueo.

The Gyeonggi, Gangwon and Chungcheon dialects have vowel inventories with 15 vowels, while the Hwanghae vowel inventory has 14 vowels, without the high front rounded vowel /ü/. While the Chungcheon dialect is reported to have ten vowels, some speakers within the provincial regions of Chungcheon have merged [e] and [ɛ], and [ü] and [ø] are usually pronounced as the diphthongs [wi] and [wɛ] respectively (Ahn and Yeon 2020:68). In the Hwanghae dialect, the standard [ø] and [jʌ] are usually pronounced as [e], and the standard [ü] and [ja] are pronounced as [wi] and [ɛ], respectively. According to Kwak (1992), this may be due to the influence of the adjacent Pyeongan dialect, which does not have rounded front vowels. The vowels of the Central dialectal area are shown in Table 14 below.

Front	Central	Back
Vowels		
i i:	ɨ	u u:
e e: ø	ʌ ʌ:	o
ɛ	a a:	

Table 14. Central dialect vowel phonemes

The Central dialects are reported to have eleven diphthongs /je jɛ jʌ ja ju jo wi we wɛ wʌ wa/ (Lee 1981:71–8, King 2006:264–80).

The Gangwon dialect simplifies two glide + vowel sequences [jʌ] and [ja] by deleting the initial glide. The sequences are pronounced as [e] and [ɛ] respectively, e.g., MK *pjʌrok* ‘flea’ becomes *peruk* in the Gangwon dialect. In most Gangwon provincial speech, the MK central vowel /ɨ/ changes to the high front vowel /i/ after an initial tense sibilant s̬, as in *s̬ita* ‘bitter’ (MK *psɨta*).

A notable phonological feature of the Central dialects is distinctive vowel length. This is an innovation which occurred after the Middle Korean period and is shared by the Gyeongsang dialect to the south of the Central dialect cluster. The other dialect areas have distinctive tone,

like Hamgyeong, distinctive vowel length like the Central dialects, or both, like Gyeongsang. The Hwanghae dialect and Jejueo are distinctive in having neither pitch accent nor long vowels (King 2006 and Yeon 2012).

4.3.2 Morphology

The Gyeonggi dialect retains the MK stem-final glottal consonant *h* and a vowel between a verb stem and the verbal ending *-ta*. In Gyeonggi, the MK /ɔ/ changed to the mid central vowel /ɨ/, as in *kathɨta* 'to be alike' (MK *kɔthɔta*). The central dialects sometimes insert a high back vowel /u/ preceding the verb final *-ta* as in *tɕip^{h}uta* 'deep' (MK *kip^{h}ta*), which also shows palatalization of the word-initial consonant. This form can be heard in Gangwon and Chungcheong in the Central area, as well as in Hamgyeong in the Northeast, Gyeongsang in the Southeast, and in Jejueo.

Like the Pyeongan dialect, the Hwanghae dialect has maintained the MK nominative marker *-ɾe/ɾɛ*. MK *na-i* I-NOM 'I' is *nɛ-ɾɛ* in the Hwanghae dialect. The Hwanghae dialect also has a unique set of interrogative verbal endings *-swiⁿkja, -siⁿkja, -niⁿkja, -ⁿkja*[9] (Yeon 2020:67) which appear to have been maintained from MK (see 3.1.3).

Although the Chungcheong dialect shares most of its grammatical features with the other Central dialects, it does have some unique locative case markers, *-ɾu/iɾu* 'to', and *-hʌnt^{h}i/hant^{h}i* 'to', which attach to inanimate and animate NPs, respectively. The locative case suffixes *-ɾu* and *-iɾu* may be retained from MK directional markers but have undergone semantic shift to develop an allative feature. The Chungcheon locative case markers *-hʌnt^{h}i,* and *-hant^{h}i* may have

[9] My sources do not indicate what morphological or semantic rules regulate the distribution of the Hwanghae interrogative suffixes.

developed as the MSK dative suffix *hant^{h}e* did, from the MK adverbial phrase *hɔn tui* 'one place'. The Chungcheon comparative suffixes innovated a final bilabial nasal, *-potʌm* and *-potam* 'than', while other regions in Korea replaced the MK comparative suffix *-tuko* with *-pota* in the 18th century. The innovative 18th century comparative *-pota* may be a grammaticalized form based on the verb *bo* 'to see'.

4.4 Southeast: The Gyeongsang dialects

In this section I will describe relevant developments from MK to Gyeongsang segmental phonology (4.4.1) and morphology (4.4.2).

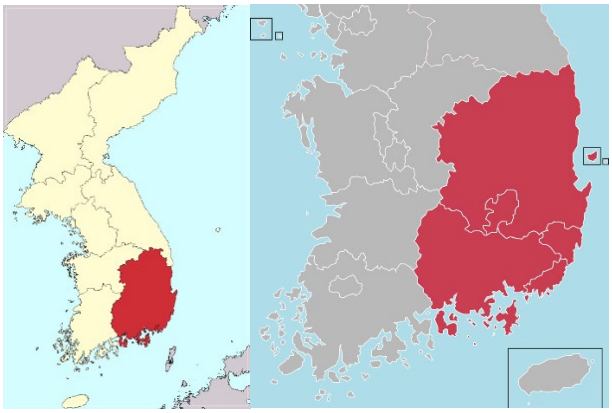


Figure 8. Left: Map of Gyeongsang province; Right North and South Gyeongsang Province

4.4.1 Segmental phonology

The modern Gyeongsang phonemic inventory differs from the MK phonemic inventory due to merging in both the consonant and vowel inventories. There is no distinction between the modern dialects of Korean in terms of their phonemic consonant inventories (see 4.1.1).

The early MK word-medial /p s k/ are maintained in the Gyeongsang dialects. The Gyeongsang dialects maintains the voiceless consonants in word-medial environments, in words such as *sɛpi* 'shrimp' (MK *saβi*), *jʌsu* 'fox' (MK *jʌzɔ*) and *paku* 'boulder' (MK *payi*).

The Gyeongsang dialects have /k/ and /t/ palatalization before a high front vowel or glide, as can be observed in words like *tɕimtɕʰi* 'kimchi' (MK *tʰimtɕʰɔi*) and *mɛtɕʰuɾo* 'like, similar' (MK *tʰjʌɾo*). The glottal fricative /h/ also moves to an alveolar place of articulation and undergoes glide deletion, as in *suŋnhata* 'ugly, grotesque' (MK *hjuŋ*) (Ahn and Yeon 2020:70). As in other dialects, palatalization preceded the loss of the palatal glide as the conditioning environment, as in MK *tʰ**j**ʌɾo* > Gyeongsang *mɛtɕʰuɾo* 'like, similar'.

Another innovation of the Gyeongsang dialects is the tensing of word-initial consonants /p t k/, as in *p͈uciɾeki* 'fragment' (MK *pusɔɾaki*) and *k͈asi* 'thorn' (MK *kasɔi*). However, Ahn and Yeon (2020:70) report that some provincial forms of the Gyeongsang dialects (e.g. Daegu and Yeongcheon) do not distinguish between lax *s* and tense *s͈,* especially in word-initial position, e.g. *sata* 'cheap' (MK *s͈ɔta* > *s͈ata* in other modern Korean dialects and Jejueo) and *saɾ* 'uncooked rice' (MK *psɔɾ* > *s͈aɾ* in other modern Korean dialects and Jejueo) (Ahn and Yeon 2020:70).

The Gyeongsang dialects are generally thought to have a six-vowel system, as shown in Table 15 below, although there is some debate as to whether the vowel inventories differ between the northern and southern areas of Gyeongsang province. In Gyeongsang MK /ɨ/ and /ʌ/ have merged as /ʌ/, and /e/ and /ɛ/, which developed after MK, have merged as /e/.

Front	Central	Back
Vowels		
i		u
e	ʌ	o
	a	

Table 15. Gyeongsang vowel phonemes

The number of diphthongs in the Gyeongsang dialects shows considerable difference between the northern and southern regions. Northern Gyeongsang has nine diphthongs /je jʌ ja ju jo wi we wʌ wa/, while Southern Gyeongsang has seven /jʌ ja ju jo wi we wa/ (King 2006:275).

Umlaut is one of the most salient features of the Gyeongsang dialects. Before /i/ or /j/, the vowels /a e o u/ become [ɛ e e i] unless the two vowels are separated by a coronal consonant. Thus MK *makhita* 'be blocked' becomes *mɛkhita* in the Gyeongsang dialects (Ahn and Yeon 2020:70). The Gyeongsang dialects also exhibit vowel fronting in the final vowel of a word for the vowels /ɨ u a ʌ/. The vowels /ɨ/ and /u/ are fronted and raised to [i] in word final position, as in MK *kasɔm* 'chest', which became *kasim* in the Gyeongsang dialects (after the /ɔ/ vowel merged with /u/). The vowels /a/ and /ʌ/ are fronted and raised to [e] word-finally, as in *tɕʰime* 'skirt' from MK *tɕʰima.*

Finally, the Gyeongsang dialects delete the glide in a diphthong after an initial consonant of a syllable, as in the word *pe* 'bone' from MK *spjʌ* (which also demonstrates fronting of the final vowel). As we saw in chapter 3, in late MK, the first consonant in syllable-initial clusters assimilated to the second consonant, creating syllable-initial geminate (tense) consonants.

In Gyeongsang province pitch accent largely follows the pattern found in the Hamgyeong dialects (see 4.2.1). As in Hamgyeong, the Gyeongsang dialects have an accent locus characterized by high pitch. In a given word, pitch rises to the accented syllable, and is followed by low tone. Unlike the pitch accent of Hamgyeong, however, one tonal pattern features no single prominent syllable, or accent. In this pattern, the first two syllables of the word carry high pitch, and all other syllables following in the phrase receive low pitch (Kim 1997). Examples 39, 40 and 41 show the high-high(-low) pattern exclusive to the Gyeongsang pitch accent, where 39 and 40 are both single words, and 41 is a phrase.

(39) H-H	(40) H-H-L	(41) H-H-L-L-L
pʰóɾí	*mútɕíkè*	*mútɕíkè-màn-tò*
fly	rainbow	rainbow-only-too
'fly'	'rainbow'	'even just a rainbow'

(Lee and Ramsey 2011:166)

Based on internal comparison between the Hamgyeong and Gyeongsang pitch accent systems, irregularities in the patterns of the Gyeongsang pitch accent are said to be the result of archaisms (Lee and Ramsey 2011:167). In comparing the Gyeongsang and Hamgyeong pitch accent systems to the Middle Korean tone system, correspondences reveal that the accented syllable in Gyeongsang is consistently found one syllable preceding the Hamgyeong locus.

Hamgyeong dialects	Gyeongsang dialects
H-L-L *tʰóḳ̟èpì* goblin 'goblin'	L-L-L *tʰòḳ̟èpì* goblin 'goblin'
L-H-L-L *tɕìp-tʰóḳ̟èpì* house-goblin 'house spirit'	H-L-L-L *tɕíp-tʰòḳ̟èpì* house-goblin 'house spirit'

Table 16. Correlations of pitch assignment in Hamgyeong and Gyeongsang dialects
(Lee and Ramsey 2011:167)

As shown in Table 16, the accented syllable in Gyeongsang words is predicted to fall to the left of the accented syllable in Hamgyeong words. When the Hamgyeong accent is word-initial, the Gyeongsang accent is assigned to the final syllable of the preceding word, e.g. *tɕip* 'house' in *tɕip-tʰoḳ̟epi* 'house spirit' receives high pitch.

4.4.2 Morphology

Gyeongsang has innovated changes to many verbal endings, such as inserting [i] into the

nominative case marker -*ka* to make -*ika* NOM. Gyeongsang also inserts a velar nasal at the end of the MK comitative marker -*kwa* and deletes the glide, making -*khang* COM, as in *nay-khang ka-ca* I-COM go-PROP 'Come with me' (Ahn and Yeon 2020:171). MK marked the distinction in question type between wh- questions and yes-no questions, and this morphological distinction has been retained by the Gyeongsang dialects and Jejueo. The MK wh- question endings were -*no* and -*ko,* and the yes/no question endings were -*na* and -*ka.* Gyeongsang maintains the MK interrogative suffixes, -*no/-ko* for wh-questions, as in examples 42 and 43, and and-*na/-ka* for yes-no questions, as in examples 44 and 45. In example 42 below, the interrogative suffix -*no* indicates the wh- question 'where', and in 43 -*ko* indicates the wh- question 'whose'. Examples 44-45 have the interrogative suffixes -*na* and -*ka*, which mark yes-no questions after a consonant or vowel, respectively.

(42) *ni ʌte kat-ʌ-**no*** (question-word question)
you where go.PST-CON-**Q**
'Where did you go?'

(43) *ikʌ nu tɕʰek -i **-ko***? (question-word question)
this who book-COP**-Q**
'Whose book is this?'

(44) *pap muŋ**na***? (yes-or-no question)
rice eat-**Q**
'Are you going to eat?'

(45) *kɨki ni tɕʰek ai **-ka***? (yes-or-no question)
this you book- NEG-**Q**
'Isn't this your book?'
(Lee and Ramsey 2000:334)

4.5 Southwest: Jeolla dialects

In this section I will describe relevant developments from MK to Jeolla phonology

(4.5.1) and morphology (4.5.2).

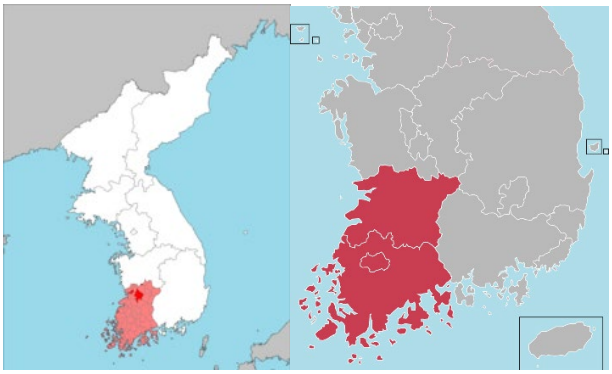


Figure 9. Left: Map of Jeolla province; Right: North and South Jeolla Province

4.5.1 Phonology

The Jeolla dialects share a consonant phoneme inventory with the other modern Korean dialects and Jejueo (see 4.1.1). Like the Gyeongsang dialects, the dialects of the Jeolla region (North Jeolla and South Jeolla) retain the proposed early MK word-medial /p s k/, which, in the Central dialects, changed to [β z ɣ] before they were lost entirely (see 3.1.1). The early MK word-medial /p s k/ consonants can be seen in the Jeolla words *sɛpɨŋkɛ* 'shrimp' (MK *saβi*), *masil* 'village' (MK *mɔzɔrh*) and *pakwu* (MK *pakwi*) 'rock' (Ahn and Yeon 2020:72).

Palatalization is also widespread in the Jeolla dialects, as it is in the Gyeongsang dialects, meaning that alveolar and velar consonants and the glottal fricative *h* are palatalized before a high front vowel or glide. Palatalization in all three of these places of articulation only occurred in the Gyeongsang and Jeolla dialects and in Jejueo. For example, in the Jeolla dialects, MK *hjʌ* 'tongue' and *hjʌŋ* 'older brother' became Jeolla *se* and *sʌŋ*, and MK *kiɾh* 'long' and **kjʌsɨɾh* 'winter' became Jeolla *tɕiɾ* and *tɕʌsiɾ*, respectively.

The Jeolla dialects, like the Gyeongsang dialects, exhibit tensing of consonants /k p t s/ word-initially, as in *k͈ɛkuɾakt͈ɛi* 'frog' (MK *kɛkoɾ*) and *p͈aktɕwi* 'bat' (MK *bɔɾktɕwi*) (Ahn and

Yeon 2020:72).

Consonants in word-initial and medial position often undergo aspiration in the Jeolla dialects, e.g. *kʰamani* (MK *kɔmɔni*) and *tɕʰamsi* (MK *tɕeamsi)* 'moment'. It is not known what factors motivate tensing versus aspiration in the word-initial environment. In MK aspiration was often the result of metathesis with a preceding *h*, but we do not have textual evidence of the MK forms in the peripheral dialects, such as the Jeolla dialects. Aspiration versus tensing in Jejueo often is tied to language production by older versus younger generations, perhaps due to the first language of most young people being MSK, which has tensing that replaced earlier MK consonant clusters (e.g. MK *psɔɾ* >MSK *s̬al* 'uncooked rice').

The Jeolla dialects have a ten-vowel system as shown in Table 17 below. The phonemes /e/ and /ɛ/ developed after MK, but as in many of the Korean dialectal areas, the phonemes /e/ and /ɛ/ are merging for younger speakers. The Jeolla dialects have seven diphthongs in their vowel system /jɛ jʌ ja ju jo wʌ wa/ (Ahn and Yeon 2020:71).

Front	Central	Back
Vowels		
i	ɨ	u
e (ɛ in North Jeolla)	ʌ	o
	a	

Table 17 Vowel phonemes of the Jeolla dialect

Like the Gyeongsang dialects, the Jeolla dialects delete glides after the syllable-initial consonant, as in *p̬eŋaɾi* 'chick' (MK *pjʌŋaɾ*) and *p̬i* 'bone' (MK *spjʌ*).

Also, like Gyeongsang, Jeolla exhibits robust umlaut when the vowels /o/ or /a/ occur before an *i*, either within a single morpheme or before a suffix, such as the nominative marker *-i*. Umlaut in the Jeolla dialects results in a two-vowel sequence where the vowel reaches the

frontness and height of a following *i* vowel as in *soik-i* inside-NOM 'inside' (MK *sop-i*), *paip-i* food-NOM 'food' (MK *bab-i*) and *kaiɾita* 'to hide' (MK *kɔɾita*) (Ahn and Yeon 2020:72).

The Jeolla dialects also exhibit fronting for the vowels /ɨ u e a/. In word-final or penultimate position, /ɨ/, /u/ and /e/ are realized as [i], as in *kasim* 'chest' (MK *kasɔm*), *kaɾi* 'powder' (MK *kɔrɔ*) and *ki* 'crab' (MK *ke*). The MK back rounded vowel /ɔ/ merged with /u/ in non-initial syllables (Lee and Ramsey 2011:262), and in Jeolla fronted to [i]. In word-final or penultimate position the low central vowel /a/ raises to [e], as in *tɕʰime* 'skirt' (MK *tɕʰima*) (Ahn and Yeon 2020:71).

4.5.2 Morphology

The Jeolla dialects have innovated many suffixes that are not shared with other modern dialects of Korean or with Jejueo. According to Ahn and Yeon (2020:72) the noun suffixes *-kasim*, *-kʌɾi*, *-teki*, *-po*, - *tɕɛŋi*, *-pɛki/pɛŋi*, and *-katɕi* are unique grammatical markers that are not observed in other dialects, as in the Jeolla word *soɾakteki* 'sound' (MK *soɾɔi*).[10] However, *-tɕɛŋi* is a noun suffix used in Jejueo as a kind of agentivizer, and is lexicalized in MSK words such as *kʰotɕɛŋi* 'a person with a big nose', i.e., a person of European heritage.

The Jeolla dialects also have innovations in their inventories of verb-final mood suffixes, some of which overlap with those in Jejueo. For example, *-ja/-nja* is an interrogative suffix in both Jeolla and Jejueo. Some forms, such as the imperative suffix *-ɾanⁿke,* are innovations unique to the Jeolla province.

[10] My source does not provide glosses for these nominal suffixes.

4.6 Summary

In this chapter we have considered the five major dialectal regions of Korea, and the linguistic criteria for organizing them as such. We have discussed some of the phonological and morphological features in each dialect that have been maintained since the MK period as well as some of those that have been innovated in a particular dialect or across an entire region, such as the spread of palatalization from the southern dialects to the northern dialects. Table 18 below provides a comparative view of some of the phonological features that form isoglosses across the regional dialects of Korea, and Jejueo. Features included in this table show evidence of historical sound changes that extended through some, but not all, of the Korean peninsula and Jeju Island.

	Pyeongan	Hamgyeong	Central	Jeolla	Gyeongsang	Jejueo
pitch	No	Yes	No	No	Yes	No
vowel length	No	No	No	No	Yes	Yes
palatalization	No	Some	Some	All	All	All
maintenance of word-medial obstruents */p k s/	No	Yes	No	No	No	/s/ only
umlaut	No	Yes	No	Yes	Yes	Yes
glide deletion	Yes	No	Yes, for Gangwon, Chungcheon	Yes	Yes	Yes

Table 18. Phonological features compared across modern Korean dialects and Jejueo

In the next chapter we will investigate which of these features are also found in Jejueo and will discuss which phonological and morphosyntactic features appear to be holdovers from MK, and which are likely due to contact between Jejueo and Korean dialectal groups.

Chapter 5
Retentions and Innovations in Jejueo



Figure 10. Map of Jeju province

In this chapter I discuss features of Jejueo and their relation to MK, the modern Korean dialects, and innovations that appear to have developed in Jejueo alone. I apply this analysis to the historical record of demographic movement on Jeju Island to argue for an approximate timeline of Jejueo's contact with other languages and language varieties that played a critical role in Jejueo's historical development.

5.1 Phonology

The Jejueo phonemic inventory differs from the MK phonemic inventory due to mergers in the consonant inventory and innovation of /e/ and /ɛ/ in the vowel inventory, similar to the modern dialects of Korean. Jejueo retains the early MK obstruent /s/ (but not /p/ or /k/) in word-medial position, which underwent voicing in the Central dialects in late MK to [z]. Examples of Jejueo's maintenance of the earlier, unvoiced word-medial consonants are *pusʌp* 'charcoal burner' from MK **pɨsʌp* (Stonham 2011:97), *jʌsi* 'fox' (Hyun and Kang 2014) from MK **jʌsɔ*. The Jejueo consonant phonemic inventory is given in Table 18 below.

	Bilabial	Dental	Palatal	Velar	Glottal
Plosive: lax	p [p,b]	t [t,d]	tɕ [tɕ, dʑ]	k [k,g]	
Aspirated	p^h	t^h	$tɕ^h$	k^h	
Tense	p̬	t̬	t̬ɕ	k̬	
Voiceless: lax		s			h
Voiceless: tense		s̬			
Nasal	m	n		ŋ	
Liquid		ɾ [ɾ,l]			
Glide	w		j		

Table 19. Jejueo consonant phonemes

Like the Gyeongsang and Jeolla dialects of Korean, Jejueo exhibits massive palatalization of obstruents. The consonants /t s s̬ k h/ are all palatalized before a high front vowel or glide, such as [tɕimtɕʰi] 'kimchi' from MK *timtɕʰɔi*, [ʃigan] 'time' (MK *sikan*), [ʃi] 'sour' (MK *psi* >*s̬i*, 17th century), [tɕiɾ] 'street' (MK *kiɾ*), and [sʌŋ] 'older brother' (MK *hjʌŋ*). Palatalization began in the south in Korea and spread to the middle of the country by the 18th century (Lee and Ramsey 2011), but the velar stop /k/ underwent palatalization later than the others, and /k/ palatalization never occurred in the northern dialects. Stops in the Pyeongan and Yukchin dialects never underwent a process of palatalization.

As with the Jeolla dialect, lenis stop consonants in Jejueo sometimes undergo aspiration if the lenis consonant is in the onset of a morpheme that is suffixed to a stem ending in a sonorant consonant (Kim 2014:103–105, Ko 2011:33). This is an innovation, since MK had aspirated stop phonemes but no synchronic process of aspiration. In the late MK period, consonant clusters of a liquid plus a lenis stop became simplified as tense consonants in the Korean dialects and aspirated stops in Jejueo, as when *kɔsɨɾ* 'autumn' and *tɕaŋma* 'rainy season' are pronounced together as *kɔsɨɾ tɕʰaŋma* 'autumn rainy season' (Yang et al. 2019).

According to Yang et al. (2019) at least some cases of aspiration in Jejueo reflect the

MK "hidden h" (Lee and Ramsey 2011:183), an underlying final *h* in a sonorant + *h* cluster in the coda of a word stem. The *h* did not appear in isolated words, but triggered aspiration on the lenis stop onset of a following word in a compound or suffixal structure. Some examples of this process continuing in Jejueo are included in examples 46-49 below. The MK underlying coda *h* is also maintained in a few words in MSK, such as *amtʰaɾk* 'hen' (where unaspirated *taɾk* is 'chicken') which is a reflex of the MK 'hidden h' in the coda of *am*, a word for 'female' no longer used as an independent word in MSK (Lee and Ramsey 2011:171, Yang et al. 2019:30).

(46) /toɾh/ +/tɕɛŋi/ [toɾhtɕʰɛŋi]
'stone' + 'maker' : 'wall maker'

(47) /baɾɨh/ + /kweki/ [baɾɨhkʰweki]
'sea' + 'meat' : 'fish'

(48) /anh/ + /kʌɾi/ [anhkʰʌɾi]
inside + house : 'inner house' (in the Jeju inner-outer house architectural style)

(49) /anh/ + /tɨɾe/ [antʰɨɾe] or [an̪ṯɨɾe]
'in' + DIR : 'to the front'
(Yang et al. 2019:26)

Like the Jeolla and Gyeongsang dialects of Korean, Jejueo also has tensing of lenis consonants. In Jeolla and Gyeongsang dialects word-initial lenis consonants (/p t k s/ in Jeolla and /p t k/ in Gyeongsang) undergo tensing, e.g., *k̪ɛkuɾak̪ṯɕi* 'frog' (from MK *kɛkoɾ*) in Jeolla dialect. In Jejueo, however, lenis consonants are predictably tensed after a stop consonant, which appears to be a process unique to Jejueo. Some examples of tensing in Jejueo are provided in 50-54 below.

(50) /jʌk/-/puɾ/ 'on purpose' [jʌkp̪uɾ]

(51) /nok/-/ti/ 'mung beans' [nok̪ṯi]

(52) /nop/-/se/ 'wind from east or west' [nops̪e]

(53) /kak/-/tɕi/ ‘bean pod’ [kakt̪ɕi]

(54) /tɔt/-/taŋ/ ‘run + suffix’ [tɔtt̪aŋ]

Gemination of both sonorant and obstruent consonants before a vowel-initial morpheme appears to be an innovation since the MK period that is unique to Jejueo. The sonorants /ɾ/ and /n/ in coda position become geminate when preceding a vowel-initial suffix, as in *iɾ-uʌɾ* one-month ‘January’, which is pronounced [illʌɾ] in Jejueo (Yang et al. 2019:31). As with the Korean dialects, a geminate /ɾ/ is pronounced as an [ll]. Sonorant gemination with [h] deletion occurs in compounds as well in Jejueo, like *tɛʌnhwa* ‘telephone’ [tɛʌnnwa], *manhwa* ‘comic book’ [mannwa] and *iɾ-hɔk-njʌn* one-school-grade ‘first grade’ [illɔŋnyeon]. As with MSK and all other Korean dialects, velar stops in Jejueo become nasal stops when they occur before nasals, as in, *tɔk-nun* ‘chicken’s eye’ [tɔŋnun] and *sɔtap-maḳe* ‘laundry stick’ [sɔtammaḳ̪e] (Yang et al. 2019:31). Obstruents undergo gemination in Jejueo, in effect, tensing, when they occur in the coda of a compound preceding a vowel onset (Yang et al. 2019:31). Examples of this process include *hankuk-ɨmsik* ‘Korean food’ [hankuḳ̪ɨmsik] and *mat-atɨɾ* ‘first son’ [maṭ̪atɨɾ] Jung (2001:307).

Like the Pyeongan dialect of Korean, Jejueo maintains the MK [n] preceding a high front vowel or glide, whereas in all dialectal areas of Korea outside of Pyeongan in the Northwest the [n] before [i] was deleted. This process has also been analyzed as “n-insertion” that occurs in some compounds (Yang et al. 2019:27), but in examples given to support this analysis, such as *hɛ-njʌ* sea-woman ‘female diver’ (from MK *njʌ* ‘woman’), it is clear the [n] was present during the MK era even though the modern orthography in Hangeul, the Korean writing system, reflects the n-deletion that occurred in the Central Korean dialects. To wit, *jʌm-njʌ*, another word for ‘female diver,’ is more commonly pronounced [jʌmnɛ] in Jejueo, and would

not be the environment that would trigger the proposed rule of n-insertion before a high front vowel or glide, since there the nasal precedes /e/, unless the /n/ was inserted before the glide was deleted. Other examples provided by Yang et al. (2019:27) may reflect the gemination of sonorants before a vowel rather than n-insertion. The given example, *kutɕin il* [kutɕinnil] 'unpleasant/hard work', may show the Jejueo gemination of the sonorant /n/ before the vowel /i/, rather than a separate process of n-insertion.

One of the most salient features of Jejueo is the word-final velar nasal, an innovation that occurred in Jejueo and none of the Korean dialects. In some cases, like *naŋ* 'tree' (from MK *namk*), the word-final velar nasal appears to be due to a process of assimilation with the MK nasal + velar stop cluster in the coda, but an innovative epenthetic final velar nasal occurs in many Jejueo words without such assimilation, including kinship terminology like *haɾmaŋ* 'grandmother' (MK *han ʌmʌni*) and *oɾapaŋ* 'older brother of female' (MK *oɾapani*), ecological terms like *pataŋ* 'sea' (MK *patah*) and even borrowed lexical items like *miḳaŋ* from Japanese *mikan* 'mandarin orange'. When the Jejueo velar nasal occurs in other environments it may be maintaining the velar nasal from MK, such as in MK *mɔiŋkɔɾta* 'make', which becomes *meŋɨɾta* in Jejueo and *mantɨɾta* in MSK. The origin of the final velar nasal in kinship terms like *haɾmaŋ* 'grandmother' and *oɾapaŋ* 'older brother of female' is unknown but may be indicative of a sound change involving the final nasal in the MK forms, which had been part of a separate honorific morpheme, -*nim*, and had lost the final bilabial nasal. Because all of the kinship terminology in Jejueo has a final velar nasal, there may also have been a process of leveling within this closed semantic set.

The vowel inventory of Jejueo maintains the MK *arae a*, a low back rounded vowel. In all of the modern Korean dialects /ɔ/ has merged with /o/ or /a/ so this feature of Jejueo is well-

known and has attracted attention in scholarly research as well as the cultural branding of Jeju Island, where the *arae a* can be seen in restaurant names and the like. Like the modern dialects of Korean, other vowels have shifted, giving Jejueo nine vowels where MK had seven. The vowel phonemic inventory for Jejueo is shown in Table 19 below.

Front	Central	Back
Vowels		
i	ɨ	u
e	ʌ	o
ɛ	a	ɔ

Table 20. Jejueo vowel phonemes

Jejueo has 13 diphthongs, more than any of the modern Korean dialects and a significantly larger inventory than is found in the nearby southern Korean dialects. Most of the diphthongs in Jejueo are innovations. Like the modern Korean dialects, Jejueo has lost the MK off-glides and on-off glides (e.g. *jaj*), except one: /ɨj/ is maintained by some speakers of Jejueo (Moon et al. 2015, Yang et al. 2019). They report that just 10% of male speakers and no female speakers in their study pronounced /ɨj/ as a diphthong, whereas normally speakers simplified it to [ɨ] in word-initial position, e.g. *ɨinam* pronounced [ɨnam] 'fog' and [i] elsewhere, as in *pas-tɨi* field-LOC [paṭi] 'in the field' and *moɨita* [moita] 'nonglutinous' (Moon et al. 2015, Yang et al. 2019). The diphthong /ɨi/ is also maintained in the Central Korean dialects word-initially in careful speech, but often simplified, albeit differently from Jejueo. In MSK /ɨj/ is pronounced [i] following a consonant word-finally (e.g. *munɨi* > [muni] 'pattern'), [e] in a monosyllabic word (e.g. *nʌɨi* > [nʌe] 'your'), and as [ɨj], [i] or [ɨ] word-initially (e.g. *ɨisa* > [ɨisa]/[ɨsa]/[isa] 'doctor'). The Jejueo diphthong inventory is presented in Table 20 below.

Front	Central	Back
Onglides		
je, jɛ	jʌ, ja	ju, jo
wi, we, wɛ	wʌ, wa	jɔ
Off-glides		ɨi

Table 21. Jejueo diphthong inventory

Jejueo has maintained the strict MK system of yin-yang-neutral vowel harmony (3.1) where, most often in suffixes, the yang vowel /a/ is produced following /ɔ/ in addition to /a/ and /o/. Yin vowels include /ɨ u ʌ/ and the vowel /i/ is neutral. In the modern dialects of Korean, the MK vowel harmony system has broken down due to the loss of /ɔ/ but is maintained within closed sets such as ideophones, where yang vowels have a positive feature and yin vowels have a negative feature, e.g. *mallaŋmallaŋ* 'soft' versus *mullʌŋmullʌŋ* 'mushy'.

The Jejueo system of vowel harmony is shown in examples 55 and 56 below. In 55 the /ɔ/ vowel in the verbal root triggers an [a] in the following grammatical suffix, as was the case in MK. In 56 the /ʌ/ in the root triggers a [ʌ] in the following suffix, as was also the rule in MK and was maintained in all of the Korean dialects and Jejueo.

(55) *jɔk -as -ʌ*
mature-PFV- DECL.PLAIN
'(She/he) is mature.' (Whitman 2002, Yang et al. 2019:45)

(56) *mʌk-ʌs -ʌ*
eat -PRV-DECL.PLAIN
'(She/he) ate.' (Yang et al. 2019:45)

Like the southern Korean dialects in Jeolla and Gyeongsang provinces, Jejueo simplifies word-initial consonant + glide structures by deleting the glide. An example of this is MK *pjʌrok* 'flea' which became *perok* in Jejueo. As in this example, the vowel is often raised and fronted to [e] in this environment, as in MK *pʰjʌnan* 'comfortable' which is *pʰenan* in Jejueo. This is not

always the case, however, as in the MK suffix *-mjʌn* ‘if, when’, which becomes *-min* ‘if’ and *-mʌŋ* ‘while’ in Jejueo. The suffix did not undergo a semantic split into two separate morphemes in the modern Korean dialects.

Like the Chungcheon dialect of Korean in the Central area, Jejueo has umlaut. In Jejueo an /i/-initial suffix triggers umlaut, and the vowels /a ʌ o/ typically undergo umlaut in (C)VC stems preceding an *i*-initial suffix, as shown in examples 57-59 below (Kim 2001:187, Yang et al. 2019:35).

(57) a ⟶ e *anta* ‘hold’ ⟶ *en-ki-da* ‘be held’

(58) ʌ ⟶ e *mʌkta* ‘eat’ ⟶ *mek-hi-ta* ‘be eaten’

(59) o ⟶ we *nokta* ‘melt’ ⟶ *nwek-i-ta* ‘make melt’ (Yang et al. 2019:35)

According to Yang et al. (2019), since the *i*-initial causative and passive suffixes that appear in most patterns of umlaut in Jejueo are nonproductive, umlaut may be a diachronic rather than a synchronic feature of Jejueo (Yang et al. 2019:35). As Yang et al. point out, umlaut sometimes fails to apply when the conditions for it appear to be met, such as in the passive form of *pop-ta* ‘pluck, pick’, which is *pop-hi-ta* without umlaut (Yang et al. 2019:35). Umlaut does not occur when the root ends in [l], as in *sal-li-u-ta* ‘revive’.

5.2 Morphosyntax

Although the subject is often unmarked, Jejueo has a relatively large inventory of nominative suffixes. Like most of the modern Korean dialects, Jejueo maintains the MK nominative marker *-i* and the newer *-ka* and are attached to stems ending in a consonant and a vowel, respectively. A variant of *-ka*, *-ɾa/ɾe*, was also used by elderly speakers at least until the 1980’s (Kang 1983:24–25, 40, Yang et al. 2019:64). This marker is also used currently by speakers in Pyeongan, Korea’s northwest dialectal region, and in Hwanghae within the central

region. In what appears to be a semantic development unique to Jejueo, the locative marker *-isʌ* can also be suffixed to subjects denoting a group or community (Oh et al. 2015:107, Jung 1983:11). The allomorph *-sʌ* follows a vowel-final stem (Yang et al. 2019:64). Subjects often occur without any marker, especially in short sentences where there is no danger of misunderstanding (Yang et al. 2019:50). However, the nominative is used in situations such as when the speaker wishes to highlight the referent of the subject (the subject and *only* the subject). In examples 60-62 the nominative markers are bolded.

(60) *Mina-**ka*** *kop* *-tɕu*
Mina-**NOM** pretty-SE
'Mina (not anyone else) is pretty.'

(61) *nɨksin* *-ne sʌ* *-nʌi-**ɾa*** *atɛ-an* *noɾ-ams* *-in* *-ti*
old.person-PL three-four-**NOM** sit -CON play-CONT-NPST-SE
'Several old people are hanging out, sitting around.'

(62) *ʌt̪ʌŋ u* *-njʌk-tɕʰip* ***-isʌ*** *aɾ* *-as* *-in* *-ko?*
how above-side -house-**NOM** know-PFV-NPST-SE
'How has the family from above found out (about it)?'
(adapted from Yang et al. 2019:50-51)

Jejueo also maintains the MK *-ɨl/-lɨl* suffix to mark accusative case, though the suffix is used infrequently. The accusative suffix is bolded in example 63 below.

(63) *hɔksɛŋ- ɨn* *sʌnsɨiŋ tɕɛk* ***-il*** *anne -psu* *-ta*
student-TOP teacher book-**ACC** give -FO[PRS]-DECL
'The student is giving a book to the teacher.'

Jejueo has two topic markers, *ɨn/n/nɨn* from MK that is shared by the modern Korean dialects, and an apparently novel topic suffix *-iraŋ*. The topic suffix *-ɨn* occurs after a noun ending in a consonant and *-nɨn* occurs after a vowel, as was the case with MK, but more often in Jejueo the contracted form *-n* occurs after a vowel (Ko 2011:138). The topic marker has two major functions: to indicate a state-setting topic or to signal a contrast (Yang et al. 2019). These

are the same two uses of the topic marker *-ɨn/-nɨn/-n* in all of the Korean dialects. An example of the state-setting topic is shown in 64 and an example of the contrastive topic is shown in 65.

(64) *onʌɾ -ɨn kweŋkinaɾ-i -u -ta*
today-TOP Sunday -be-AH-SE
'Today is Sunday.'

(65) *onʌɾ -ɨn tɕɔɾɨtɕ-jʌŋ anitwe -jʌ*
today-TOP busy- CON not become-SE
'*Today* is not possible because I'm busy (but tomorrow might be okay)'
(Yang et al. 2019)

As Yang et al. (2019) explain, when *-ɨn/-n/-nɨn* appears sentence internally, rather than at the beginning of a sentence, a topic-marked element can only have a contrastive interpretation, such as in example 66 below.

(66) *tɕʰʌɾsu -ka pentɕi-n ik -ʌɾa*
Cheolsu-NOM letter -TOP read-SE
'I learned that Cheolsu was reading the *letter* (not something else, like a newspaper).

The topic suffix *-iɾaŋ* is not well understood. In MSK and the modern Korean dialects *-(i)ɾaŋ* is a comitative marker, but this is pronounced *-(i)ɾʌŋ* in Jejueo. King (1994:26) suggests that it served as an "indicator particle" in the Korean of the seventeenth century. According to Moon (2002) and Kang (2007:61) *-iɾaŋ* in Jejueo is often interchangeable with *-ɨn* and appears to have a contrastive function. It may be more likely to suffix to a human referent. Its allomorph is *-ɾaŋ* after a vowel or *ɾ*-final stem (Yang et al. 2019). Examples of the use of topic suffix *-(i)ɾaŋ* are shown in examples 67-69.

(67) *jʌŋsu -ɾaŋ hɔʂɔɾ iɾ -hɔ-ɾa*
Yeongsu-TOP a.little work-do-SE
'Youngsu (not others), work a little!'

(68) *haɾɨpaŋ -iɾaŋ tɕʌɾe atɕ-ip -sʌ*
grandfather-TOP there-DIR sit-AH-SE
'Grandfather (not others), sit over there!'

(69) *na -ɾaŋ mɔntɕʰʌ ɔmɔŋ-hɔ-kʰ -jʌ*
1SG-TOP first move-do-PROSP-SE
'I will move first (before others).'
A topic marker may co-occur with a dative suffix, but not with the nominative, accusative or genitive suffixes. When co-occurring with a dative suffix the form *-ɾaŋ* appears to be more natural as a choice in topic markers (Yang et al. 2019:57). The co-occuring dative and topic suffixes are shown in example 70 below.

(70) *apaŋ -sinti -ɾaŋ i -kʌ anne-ɾa*
father-DAT-TOP this-thing give-IMP
'Give this to your *father*!'

A distinctive feature of Jejueo's morphological system is its strategy for expressing possession. Unlike in MK and the modern Korean dialects, in Jejueo possession is most often marked by possessor-possessum juxtaposition. This contrasts with MSK, where possession is expressed by the particle *ɨi* suffixed to the possessors, which dates back to the MK period used for informal animate referents. Example 71 illustrates the juxtaposition of possessor *sʌnsɛŋnim* 'teacher' and possessum *tɕʰɛk* 'book'.

(71) *sʌnsɛŋ -nim -i haksɛŋ-sinti sʌnsɛŋ -nim tɕʰɛk-ɨl tɕuʌ-msu -ta*
teacher-HON-NOM student-DAT teacher-HON book-ACC give -FO[PRS]-DECL
'The teacher is giving her book to the student.'

Jejueo has other possessive suffixes maintained from MK, *-i/-ɨi*, *-ne* and *-s.* Like MSK and all of the modern dialects of Korean, Jejueo has the MK suffix *-i/-ɨi* to mark possession on both animate and inanimate nouns. The allomorphs of *-i/-ɨi* are *-e* or *-je* after a stem that ends in /i/, as can be seen in examples 72 and 73 (Yang et al. 2019:53).

(72) *tɕip* ***-i*** *pas -ɨn ʌtɨi is-ʌ?*
house-**GEN** field-TOP where be-SE
'Where is your family's field?'

(73) *si* ***-e/je*** *-s* *-manuŋ-i* *-ɾa?*
city-**GEN**-PGEN-garlic -be-SE
'Is it the garlic from the city?' (Yang et al. 2019:53)

The associative plural suffix *-ne*, which is maintained in Jejueo and all of the modern Korean dialects, can also be analyzed as a possessive marker (Ko 2011:145; Kang 2007:55, Yang et al. 2019:47). In MSK *-ne* is most commonly used as a possessive marker for one's house or place, as in the Seoul restaurant name *juni-ne mastɕip* 'Yooni's Restaurant'. In Jejueo the possessive suffix *-ne* appears in the same type of constructions, as seen in example 74 below.

(74) *kai* *ni-**ne*** *tɕip* *-ii* *saɾ-ams* *-in* *-ja?*
3SG 2-PL.GEN house-LOC live-CONT-NPST-SE
'Is s/he living in your (and your family's) house?' (Yang et al. 2019:47)

The MK genitive marker *-s* was suffixed to formal animate nouns and inanimate nouns and appears in Jejueo in a closed set of compound nouns and phrases as the '*sai-siot*', or 'between s'. This is because the genitive suffix *-s*, having lost the original polite feature, marks a loosely possessive relationship between an inanimate possessor and possessum, if the first noun ends in a consonant and the second noun begins in a vowel (Yang et al. 2019). Examples of this are shown in examples 75-77 below. The genitive *-s* also appears to be at play in some names for baby animals in Jejueo, where the word for 'baby' going back to MK is *aki.* This set of Jeju animal words includes *dok-s-eki* chicken-GEN-DIM 'egg', *moŋ-s-eŋi* horse-GEN-DIM 'foal' and *kaŋ-s-eŋi* dog-GEN-DIM 'puppy'. Even the MSK taboo word *kɛ-s-eki* dog-GEN-DIM 'son of a bitch' may feature a fossilized genitive *-s* suffixed to the MK word for 'dog', *kahi.*

The following examples show the *sai-siot* in Jejueo. Similar fossilized compounds can be found in MSK, such as *tɕʰo-s-puɾ* 'candle flame' (MK from Chinese *tɕʰjo*).

(75) *sʌ -s -karɨm*
west-GEN-neighborhood
'neighborhood in the west

(76) *kɔtɕʰi-s -naŋ*
chili -GEN-tree
'chili plant'

(77) *hwe-s -kuk*
raw-GEN-soup
'raw fish soup' (Ko 2011a:88–89, Yang et al. 2019:48, Ko, et al. 2014:231-238)

Jejueo coordination is consistently postpositive (suffixal), but Jejueo is flexible in its use of disyndetic (A-co B-co), monosyndetic (A-co B) and polysyndetic (A-co B-co C-co) coordination when conjunctions are suffixed to nominals. Bound conjunctions attach to NPs and free conjunctions follow VPs at the clausal level. Jejueo maintains MK comitative case markers *-wa/-kwa* as *-waŋ* and *-kwaŋ* 'with'. The origin of Jejueo's other comitative suffix *-jʌŋ* is unknown, as it is not found in the Korean dialects, but perhaps it evolved from MK's allophonic comitative suffix *-ɣa*, which was in complementary distribution with *-wa* following a flap *ɾ*. The suffix *-hʌko/-hʌkok* 'and' may attach to animate NPs, while only the bound conjunction attaches to inanimate NPs (Kang 2005). Jejueo's repertoire of bound conjunctions appears to be syntactically and semantically identical to bound conjunctions in the modern Korean dialects.

Jejueo suffixal conjunction *-hʌko* has an allomorphic variant *-hʌkok*, which in earlier Jejueo appeared before consonant-initial forms. The suffix *-hʌko* 'and'attaches to the first or both conjuncts in coordination, which may be animate or inanimate NPs. Jejueo *-hʌko* 'and' and MSK *-hako* 'and' are cognate and have the same syntactic and semantic features, although MSK *-hako* does not have an allomorphic variant. This suffix does not appear to be in the written record of MK, but possibly evolved from *hɔ* 'do' + *ko* 'and'.

(78) *harmaŋ* ***-hʌko*** *sontɕi* *-ka* *milkam-ɨl* *tʰam-tɕʌ*
grandmother=CONJ grandchild-NOM orange -ACC pick -DECL[PRS]
'The grandmother and grandchild are picking oranges.'

Jejueo also has the comitative case suffixes *-jʌŋ* and *-kwaŋ*, with *-kwaŋ* maintained from MK. These suffix to the first or both NP conjuncts in coordination. The comitative case suffixes are in complementary distribution in Jejueo: *-kwaŋ* 'with' follows consonant-final forms, while *-jʌŋ* 'with' follows vowel-final forms. Cognate forms in the Korean dialects are also in complementary distribution, with *-kwa* 'with' following consonants, and *-wa* 'with' following vowels, but *-jʌŋ* appears to be an innovation in Jejueo.

(79) s*ontɕi* *-ja* *tɕʌ* *harmaŋ* *-i* ***-jʌŋ*** *ka-kɨneŋ miḳaŋ tʰa* *-ora*
grandchild-VOC there grandmother-NOM-COM go-for orange pick-IMP
'Grandchild, go there with Grandmother to pick oranges.'

(80) *harmaŋ* ***-kwaŋ*** *sontɕi* *-ka* *patʰ* *-tisʌ* *miḳaŋ ṭa* *-go*
grandmother-COM grandchild-NOM garden-LOC orange pick-CONT
-isu *-ta*
-EXIST.FO[PRS]-DECL
'The grandmother and grandchild are picking oranges in the garden.'

Since the MK period dative suffixes have grammaticalized from locative adverbials in Jejueo as well as the modern dialects of Korean. However, Jejueo's cline of grammaticalization is separate from that of the Korean dialects. Jejueo has four etymologically related locative case markers. Its locative case marker until the 15th century was *-tɔ* 'at, to'. In the early Joseon period of the 15th and 16th centuries Jejueo borrowed the locative morpheme *-de* 'at, to', and directional morpheme *-dere* 'to, toward' from Manchu. According to Kang (2005), the Jejueo locative marker *-tɔ* 'at, to' later underwent phonetic change to become *-ti* 'at, to' and *-i* 'at, to' in contemporary Jejueo. The borrowed Manchu allative morpheme *-dere* underwent phonetic change to become the directional-dative case markers *-tire* 'to, toward' and *-re* 'to, toward' in contemporary Jejueo (Kang 2005). Today *-ti*, *-i*, *-ɨre*, and *-re* have overlapping but distinct

semantic features as the set of locative morphemes in Jejueo. While *-ti*, *-i*, *-ɨre*, *-re* all evince a dative meaning when suffixed to animate NPs, the MSK and modern dialectal locative and directional markers *-e* ‘at, to’ and *-ɨro* ‘toward’ do not have a dative feature. It is likely that *-de* from Manchu, which the directional loan *-dere* also comes from, changed the semantic structure of Jejueo locative morphemes during the early Joseon period. Middle Korean, which lasted until the end of the 15th century, did not have dative case morphemes, but marked dative roles on NPs with adverbial postpositions (Park and Lee 2006:259). It is possible that under influence from Manchu Jejueo borrowed *-de* and *-dere* to fill a semantic gap in the morphological system.

Middle Korean did not have a set of dative case suffixes. Before the Early Modern Korean period began in the early 16th century, dative case was marked by postpositional phrases. Park and Lee (2006:260) present a compelling case that *-hant^{h}e* ‘to’, along with other Korean dative markers such as *-eke* ‘to’, grammaticalized from these postpositional phrases. Ko et al. (2014) note that *-toi* ‘to’ is attested as a locative suffix attached to NPs in Middle Korean documents. According to Park and Lee (2006) in 15th-century Middle Korean documents *hʌn t^{h}oi* ‘one place’ is attested as a phrase with full semantic transparency. The cline of grammaticalization began with *hʌn t^{h}oi* ‘one place’ undergoing constructional constraints, following an NP and preceding one of a closed set of VPs. Production of *hʌnt^{h}oi* ‘one place’ in fixed constructions generally took the form in example 81 below.

(81) *NP-wa hʌn-t^{h}oi iss-ta/o-ta/ka-ta*
NP-COM one-LOC be-INF/come-INF/go-INF
‘Be/come/go to the same place with...’ Park and Lee (2006)

Through the 17th and 18th centuries, beginning in the Early Modern Korean period, *hʌnt^{h}oi* ‘one place’ was produced in fixed constructions with growing frequency. In the 19th century, *hʌnt^{h}oi* ‘one place’ underwent phonological reduction to become *-hant^{h}e* in MSK (Park

and Lee 2006). While -*ant^{h}i* ‘to’ is also built on the MK *toi* ‘place’, I argue that the Jejueo form, which on the surface seems cognate with MSK and modern dialectal -*hante*, is actually a grammaticalization of locative -*an* ‘in’ and -*toi* or -*tui* in Jejueo, much like the clines of grammaticalization for Jejueo dative suffix -*ap^{h}ui* (*ap* ‘front’ + *ui* ‘LOC’). Jejueo -*ant^{h}i* and -*ap^{h}i* underwent semantic bleaching and adopted further syntactic constraints, becoming the dative markers which suffix to animate NPs in Jejueo. The aspiration in -*ant^{h}i* is thought to be a reflex of the stem-final /h/ in the MK form *anh* ‘in’ (Yang et al. 2019:67).

Locative case morphemes in Jejueo feature greater distributional potential than those in the modern Korean dialects. In addition to marking locative and dative case on nominals, the Jejueo locative morpheme -*ti* may attach to the set of demonstrative pronouns shared with MSK, to form Jejueo’s repertoire of proximity adverbs. Interestingly, the Jejueo locational postposition -*ap-i* front-LOC ‘in front of’ is used in complementary distribution with its grammaticalized form, the dative case marker -*ap^{h}i* ‘to’. In the Korean dialects, the grammaticalization of the cognate postposition -*ap^{h}e* has not occurred, and -*ap^{h}e* does not suffix to animate NPs.

The four locative markers in Jejueo with their regional dialectical variations are -*ti* (*t^{h}i*) ‘at, to’, -*i* ‘at, to’, -*tere* (-*t^{h}ire, -rire*) ‘to, toward’ and -*re* ‘to, toward’. The morpheme *ti* is semi-frozen in the locative-ablative case suffix -*tisʌ* ‘at, in, from’. The Jejueo locative marker -*i* forms a synonymous variant of the locative-ablative suffix, -*isʌ* ‘at, in, from’. The Jejueo ‘dynamic’ locative suffixes -*tisʌ* and -*isʌ* ‘at, in, from’ contain the fossilized morpheme -*sʌ*, “...whose meaning may be equated with ‘inception’ or ‘dynamicity’” (Sohn 1999:334). Jejueo -*(t)isʌ* and MSK (and all modern dialects) -*esʌ* are cognate. The locative suffix -*ti* is shown in example 82 and the dynamic locative suffix and dative suffix built on the -*ti* locative morpheme are shown in 83 and 84, respectively.

(82) *pat^{h}* ***-ti*** *gɔtɕ^{h}i kaŋ miḵaŋ t^{h}a -ke*
garden-LOC together go.CONJ orange pick-HORT
'Let's go together and pick oranges in the garden.'

(83) *pat* ***-ti****sʌ miḵaŋ t̪a -ke*
garden-LOC orange pick-HORT
"Let's pick oranges in the garden."

(84) *sʌnsiŋ -nim -i haksɛŋ-sin****ti*** *tɕ^{h}ɛk-ɨl tɕuʌm-su -goa*
teacher-HON-NOM student-DAT book-ACC give -FO[PRS] -Q
'Is the teacher giving a book to the student?'

Kwon (2011:21) reports that Jejueo has another suffix, *-kɔɾa*, that is used as a dative marker restricted to nouns with human referents and is possible only with verbs of speaking, as in example 85 (Yang et al. 2019). The suffix *-kɔɾa* is not shared by MK or any modern dialect of Korean and developed along a cline of grammaticalization apart from Jejueo dative markers which developed from locatives *-ti/-i*. Instead, the dative suffix *-kɔɾa* is derived from the Jejueo verb *kɔɾ-ta* 'to speak'.

(85) *kaɨi -kɔɾa koŋpɨi-hɔ-ɾen hɔ -p -sʌ*
3SG-DAT study-do-CON do-AH-SE
'Please, tell him to study.'

Jejueo has some other interesting morphemes maintained from Late Middle Korean, such as the diminutive morpheme *-ŋ*, which appears in the Jejueo diminutive suffix *-(s)eŋi* and the agentivizer *-tɕeŋi*. In Jejueo *–seŋi* 'young animal' can be found in compounds like *mɔŋ-seŋi* 'foal' and *kaŋ-seŋi* 'puppy' The diminutive *-ŋ* attached to *-atɕi* 'baby' in LMK and was suffixed to animals like *sjo* 'cow, ox' to form *sjo-ŋatɕi* 'calf' and *kahi* 'dog' to form *kaŋatɕi* 'puppy' (Lee and Ramsey 2011:174). It appears that the diminutive *-atɕi* and the unpalatalized form *-aki* were variants used simultaneously in MK. As Lee and Ramsey point out, "The diminutive *-aki*, which was derived from *aki* 'child' is found in *psol-aki/sol-aki* 'broken bits of rice' (*psol* 'rice')" (Lee and Ramsey 2011:174). The diminutive *-eki* can also be found in colloquial terms for types of

noses, such as *kʰomeɾseki* ‘flat nose’, *kʰopelleki* ‘pig nose’, *kʰonʌptɕeki* ‘wide nose’ and *kʰopʰulleki* ‘runny nose’.

The MK suffix *-tɕjaŋi/-tjʌŋi* ‘doer of’ indicated one’s profession, as in *tam-tɕjaŋi* ‘mud wall builder’ and *stɨi-tɕjaŋi* ‘belt maker’ (Lee and Ramsey 2011:174). This agentivizer appears to have been productive in Jejueo, with words like *pʰi-tɕɛŋi* ‘butcher’ and *jakijʌm-tɕɛŋi* ‘person looking around for food’.

5.3 Politeness registers

In Jejueo it is common to use kinship and professional titles without honorific suffixes, such as in the common titles, *sʌnsɨiŋ* ‘teacher’, *harmaŋ* ‘grandmother’ and *harɨbaŋ* ‘grandfather.’ Although the honorific suffix *-nim* ‘sir/ madam’ is productive in Jejueo, it is most common to express deference with honorific verbal endings. In MK the honorific suffix *-nim* was reserved for the closed set of kinship titles.

Most linguists report that Jejueo has three speech levels, plain, neutral and deferential. Unlike MK, Jejueo does not traditionally have subject or object honorific marking. Even names and titles are not suffixed with the respect suffix that in MK was relegated to the closed set of kinship terms (e.g., *ʌmʌnim* ‘mother’) but in MSK and the modern dialects is typically suffixed to titles such as ‘teacher’ or ‘doctor’. The three speech levels are also more fluid than in MK or the modern dialects and suffixes can mix levels of politeness.

Yang et al. (2019) report that in Jejueo, the traditional sentence enders for use in formal situations and in the presence of people who are older or of higher social status all consist of three morphemes: the addressee honorific *-ɨp*, an evidentiality marker (*-te/-ti* or *-ne/-ni*), and a sentence ender (*-ta* for statements and *-ka(ŋ)/-k̟a(ŋ)* for questions) (Yang et al. 2019). Like MK

and the modern Korean dialects, speech registers interact with mood suffixes and tense and aspect in Jejueo. The sequence is assigned to the template: verb stem–addressee honorific–evidential marker–sentence ender (Yang et al. 2019:208) as in examples 86-89.

(86) *kɨ bas-tɨi kʰɔptesani-n mak kutɕ-ip-ti-ta*
that field-place garlic-TOP very bad-AH-EVI-SE
'(I noticed that) the garlic from that field is bad (in quality).'

(87) *kai muɾ̥kuɾʌk sim-up-te-ta*
3SG octopus catch-AH-EVI-SE
'(I saw) him/her catching an octopus.'

(88) *ʌmʌŋ tɕopan mʌk-ɨp-ti-ka?*
mother breakfast eat-AH-EVI-SE
'(Did you see) mother eating breakfast?'

(89) *ʌntɕʰinak harmaŋ tɕʰip-ɨi ka-p-te-ka/kaŋ?*
last.night grandmother house-DIR go-AH-EVI-SE
'(Did you see) someone go to grandmother's house last night?'

In addition to the honorific suffixes, speakers can express the honorific status of an addressee by adding the sentence-final discourse marker *massi* to a statement or question. This particle appears to be an innovation in Jejueo grammaticalized from the word *malssɨm* honorific 'speech', which dates back to MK. Like MK, Jejueo has been documented to have separate interrogative suffixes for wh-questions and yes-no questions, unlike the modern Korean dialects besides Gyeongsang (Han 1984:235, Yang et al. 2019:208). Scholars taking this view argue that *-tia, -ka* and *-(n)ja* are yes-no interrogative suffixes, while *-ti, -ko* and *-(n)i* indicate wh-questions. However, Yang et al. (2019:205) argue that in contemporary Jejueo, while some suffixes are indeed restricted to wh-questions, none can occur only with yes-no questions.

One aspectual suffix that Jejueo has maintained since MK, unlike all of the modern dialects of Korean, is the continuative *-m*. In MK the suffix *-m* had two uses: one a nominalizer, which continues to be productive in Jejueo, and all the modern dialects of Korean (e.g. *sal-ta* 'to

live' > *salm* 'life'). The second MK use of the suffix *-m* was as a marker of continuative aspect, which has been maintained only in Jejueo, as in example 90.

(90) *tek̟j* ***-ʌms*** *-ʌ*
throw-CONT-SE
'She/he is throwing (it) away.' (Yang et al. 2019:122)

Until recently the suffixes *-m* and *-s* had been commonly analyzed as separate morphemes; for example, most Jejueo scholars analyzed the phrase *kamsuta* as *ka-m-su-ta* go-CONT-FOR-DECL for 'he/she goes'. However, Yang (2018) makes a compelling argument that *-(ʌ)ms* has grammaticalized to become a single morpheme as a continuative suffix, although its phonological shape with its complex coda is unusual for contemporary Koreanic languages. This cluster may be the result of combining the MK nominalizer *-(ʌ)m* and MK existential verb *-si-ta* 'to be' (Hyun 1976:36, Kang 1987:531, Hong 1993:103), which fused into a continuative suffix (Kim 2014 and Oh et al. 2016).

In MK suffixes ending in *-n, -m*, and *-ɾ* had a nominalizing function and, apparently, these were maintained in earlier versions of Jejueo but are now lost (Yang et al. 2019, Lee 1993:150, Hong 1993:11) as in example 91.

(91) *harmaŋ* *kamtɛʌ* *mɔn tɛus* *-eos -iɾkʌ* ***-n*** ***-ka****?*
grandmother sweet.potato all gather-PFV-FUT-NPST-SE
'Would grandmother have gathered all the sweet potatoes?'/'(I wonder whether) grandmother has gathered all the sweet potatoes.' (Yang et al. 2019:176)

5.4 Lexicon

Until recent decades Jejueo remained relatively isolated from mainland Korea. As we have seen, many MK features were maintained in Jejueo that are not found in modern Korean dialects. Similarly, Jejueo has a large inventory of words maintained from MK that were lost on the mainland. Due to Jeju Island's geographic position, Jejueo has also been the center of

language contact with non-Koreanic languages for centuries. While Japanese, Manchu Chinese and Mongolian also were in contact with MK on the mainland, Jejueo has many lexical items from these languages that were either subsequently lost on the mainland or were never borrowed into the mainland dialects. For example, we find *kwentaŋ* 'relative' from Chinese *kwʌntaŋ* [眷黨] in Jejueo, but *tɕʰintɕʰʌk* is used in modern Korean dialects. Jejueo uses the term *tɛpi* 'socks' from Japanese *tapi* [足袋], not *jaŋmal*, as on the Korean mainland.

Finally, Jejueo has a relatively small collection of words of no known origin (Table 23). Jejueo also appears to have words that are unique to Jejueo because they lexicalized from MK grammatical material in Jejueo. For example, *anne-ta* 'to give (formal)', is found only in Jejueo and not in modern dialects and may have developed as a verb from the locative postposition -*anne* 'in'. Table 22 shows some MK words that do not appear in the modern Korean dialects.

Jejueo	MK	Modern Korean dialects	gloss
kɔɾeki	*kɔɾoki*	*ʂaŋtuŋi*	'twins'
olle	*oɾɛ*	--------	'narrow path from the street to house'
kweta	*kweta*	*saraŋhata*	'love, cherish'
kutɛta	*kutɛta*	*tɛohtɛi anhta*	'not good'
sokta	*sʌkta*	*gosɛŋhata/sukohata*	'give oneself trouble'
sʌllɨta	*sʌllɨta*	*tɕʰiuta/gɨmantuta*	'clean, stop'

Table 22. Jejueo words of MK origin not found in Korean
(Yang 2018, Seok 1947, Hyun, et al. 2009, Kang 1994, Kang 2007, Park 1960, Oh, et al. 2015)

Jejueo	MK	Modern Korean dialects	gloss
kɔɾe	*mɛtoɾ*	*mɛstoɾ*	‘millstone’
pis	*sɔiŋp^{h}o*	*tɛʌnpok*	‘abalone’
ʌŋt^{h}ak	?	*joksim*	‘greed’
tɛawaɾ	*tʌmpiɾ/suh*	*tʌmpuɾ/ sup^{h}*	‘bush, forest’
kanse	?	*keiɾɨm*	‘laziness’
hajʌŋ	*man hɔi*	*manhi*	‘much, many’
wʌn	*tɛjʌnhjʌ*	*tɛʌnhjʌ*	‘not at all’
poŋkɨta	*tɛusta*	*tɛupta*	‘pick’
p^{h}erapta	*saonapta*	*sanapta*	‘rough tempered, unkind’

Table 23. Jejueo words of no known origin
(Yang 2018, Seok 1947, Hyun et al. 2009, Kang 1994, Kang 2007, Park 1960, Oh et al. 2015)

The words of unknown origin in Table 23 are not shared by any of the modern Korean dialects and are not known to be reflexes of older forms in Korean, Japanese, Mongolian, Manchu or Chinese. Some forms, such as Jejueo *p^{h}erapta* ‘rough tempered, unkind’, shared the MK adjectival suffix *-pta* with the MK form *saonapta* and all of the modern dialectal forms, but do not share a root. Other forms, such as *kɔɾe* ‘millstone’, suggest a possible semantic shift from MK *kɔɾ* ‘grind’, which was a robustly productive process in MK. More research on this topic is needed.

5.5 Where Jejueo fits in the Koreanic family tree

Keeping in mind the opacity in the Korean historical linguistic picture before MK, it is difficult to say exactly what language variety was spoken on Jeju Island before the written record

of the late MK period (918-1392 CE). Before the MK period, Jeju Island was an independent kingdom, Tamna, which then became part of the Baekje kingdom during the Three Kingdoms period (57 BCE-668 CE). The language of Gogoryeo, which is thought to have developed into MK, is only attested in geographic names in the *Samguk Sagi* (see Chapter 2). What was spoken in the southwest region of Baekje is still largely unknown. However, the phonological, morphological, and lexical features of MK that remain in modern Jejueo are possible to trace to a particular time in the development of MK, which aligns with the years exiles from the Central dialects area emigrated to Jeju Island and Jeju islanders were forcibly isolated, approximately 1300-1500 CE (see 2.1). Moreover, some features of modern Jejueo, such as its robust palatalization, align with later sound changes in the southern dialects, Gyeongsang and Jeolla, with which Jejueo has been in contact for centuries.

As mentioned in the first section of this chapter, an interesting feature that distinguishes Jejueo's phonological system from those of Gyeongsang and Jeolla is the maintenance of only the earlier word-medial /s/ of the set of phonemes /p s k/, which became [β z ɣ] in the Central dialects, before merging with other sounds and disappearing from the Central dialects (see 3.1). In Jeolla and Gyeongsang the word-medial phonemes /p s k/ were all maintained. According to Lee and Ramsey, however, voiced allophones developed in MK at different times. It is not known how early [β] and [ɣ] developed from /p/ and /k/ in voiced environments, but it is thought that these two fricatives were allophones in the Central dialects since before 1200 CE (Lee and Ramsey 2011:142). The bilabial fricative [β] began to merge with /w/ in the 14th century and disappeared from the written record entirely by around 1450 (Lee and Ramsey 2011:142). The voiced velar fricative [ɣ] stayed in the language a bit longer, merging with /ɾ/ or /w/ in the late 1500s (Lee and Ramsey 2011:142). The alveolar voiced fricative [z], however, had a different

timeline than the other two allophones. The allophone [z] did not appear in the written record until the 15th century and appears to have undergone voicing from an earlier **s* in the 14th century (Lee and Ramsey 2011:141). By the 1520's [z] is shown to be in a state of flux in the written record, where some cases showed [z] maintained and others showed it merged with /j/. By the latter half of the 16th century [z] had been lost completely in the Central dialects (Lee and Ramsey 2011:142).

Jejueo's maintenance of word-medial /s/ and not /p k/ could be due to several factors. First, the maintenance of /s/ may correspond with the timing of the influx of migrants from the mainland to Jeju Island in the 13th and 14th centuries (2.1). It appears that MK, as it was spoken at that time, became the lingua franca of Jeju Island, where migrants from mainland Korea, Mongolia and China mixed with indigenous Jeju Islanders (2.1). During these centuries, /s/ is not thought to have been replaced word-medially by [z]. Central MK speakers at this time, however, would have been producing the other two allophones, [β] and [ɣ]. As in the modern Central dialects, Jejueo does not have these allophones nor their earlier forms /p/ and /k/ word-medially. For example, MK *saβi* 'shrimp' became *sɛwi* in Jejueo, *sɛu* in the Central dialects, *sɛpi* in Gyeongsang, and *sepi* in Jeolla. MK *paɣwi* 'rock' became *pawi* in Jejueo and the Central dialects, but *paku* in Gyeongsang (Ahn and Yeon 2020:72) and *ʌŋpaku*[11] in Jeolla (Wordrow 2022). That Jejueo lost the fricatives [β] and [ɣ] could mean that these allophones were beginning to be lost when MK was spoken on Jeju Island.

[11] According to Wordrow (2022), Jejueo has another word, *waŋsʌk*, meaning 'rock', with an initial glide-vowel-velar nasal sequence similar to the initial vowel-velar nasal sequence in Jeolla *ʌŋpaku*. This could possibly indicate a more complex earlier form of the word, or an unrelated form that was produced in the Southern region of the Korean peninsula.

Another unique phonological feature of Jejueo is its word-initial aspirated phonemes, where the other modern dialects have tense consonants. The MK word-initial clusters /pt/ and /ptɕ/ became tense consonants /t͈/ and /t͈ɕ/ around the middle of the 17th century (Lee and Ramsey 2011:135), but in Jejueo these clusters became aspirated consonants /tʰ/ and /tɕʰ/. For example, MK *ptɔta* 'to pick' became *tʰata* in Jejueo and *t͈ata* in the Korean dialects, and MK *ptaɾki* 'strawberry' became *tʰaɾ* in Jejueo (without the *-ki* 'thing' morpheme) and *t͈aɾki* in the modern Korean dialects. As Jejueo innovated the aspiration sound change, it appears to date the split from Korean to before the mid-17th century.

Morphological changes in MK, such as the grammaticalization of MK *hʌn tʰoi* 'one place' to dative marker *-hante* 'to', also help to date Jejueo's split from Korean. As I discussed in section 5.2, *hʌn tʰoi* was attested with full semantic transparency in the 15th century, and Jejueo's locative and dative suffixes are built on the foundation of the locative morpheme *-ti* (MK *tʰoi*). Jejueo's locative-dative suffixes appear to have grammaticalized in a separate cline from those of the modern Korean dialects, meaning that Jejueo split off from Korean before the grammaticalization was complete, and perhaps before it began in the 15th century.

5.6 Summary

The present chapter provided an overview of the phonological, morphological, pragmatic and lexical features in Jejueo that have either been maintained since MK or are innovations in the Jejueo language. Some phonological features, such as the palatalization of velar and glottal consonants, show that Jejueo forms isoglosses of particular features with the southern dialects. Other features, such as umlaut, shared with the central Chungcheon dialect, are not likely to be areal features, but rather, independent innovations since the MK period. Interestingly, although clines of grammaticalization in MSK and Jejueo are similar in cases such

as the development of dative markers from locative postpositions, some of the morphological material which grammaticalized was unique in Jejueo and the modern Korean dialects, such as MSK *hant^{h}e* ‘to’ and Jejueo *ant^{h}i* ‘to’. In the next chapter I will discuss the differences between varieties of Jejueo on Jeju Island and in Osaka, Japan, and in Chapter 7 I will discuss how all of the language varieties involved, MK, Jejueo, the modern dialects of Korean, and the surrounding non-Koreanic languages, may fit together in a historical picture of Jejueo’s development as a language.

Chapter 6

A Comparison of the Two Varieties of Jejueo

6.1 Hypotheses

Based on my pilot research in Jeju and Osaka (2013) and personal conversations over the years with other Jejueo researchers, I expected the Jejueo spoken in Osaka to be more robust in retaining a more extensive vocabulary for both content words and grammatical morphemes. I also predicted that the Osakan Jejueo phonological system would show less influence from MSK, and therefore speakers would be more likely to produce Jejueo phonological features absent in MSK, such as /p t k s/ palatalization, the low back round vowel *arae a*, and glide deletion in word-initial obstruent + glide clusters. I expected to see contact effects from Japanese in Osakan Jejueo, such as borrowed vocabulary and evidence of phonological influence, such as narrower coda constraints, movement towards Japanese prosodic patterns, or higher frequencies of production for Jejueo forms that are permissible within the Japanese phonological system, such as production of the Jejueo aspirated obstruent variant over the MSK tense obstruent variant in cognates.

Now that I have surveyed the philological literature on the history of dialects of Korean and Jejueo, I turn in this chapter to an application of the Comparative Method to field data I collected in Jeju, South Korea, and Osaka, to internally reconstruct Jejueo.

6.2 Case study 1: Unstructured elicitation in Jeju and Osaka

In case study 1 I locate Jejueo features in natural speech in Jeju and Osaka to determine

which features have been maintained from an older variety of Jejueo, and which features are innovative in each community. From this I analyze the current clines of language development in each community as well as some of the forms of an earlier variety of Jejueo that have been lost in one of the communities.

6.2.1 Methodology

In 2019 on Jeju Island I recorded 30-90 minutes of unstructured Jejueo speech with each of ten speakers in their 80s and 90s, accompanied by a native speaker assistant. In 2019 in Osaka I recorded 30-90 minutes of unstructured Jejueo speech with seven speakers in their 70s, 80s and 90s, accompanied by a native speaker assistant. Data from three speakers in Osaka was thrown out because speakers used only MSK and Japanese and not Jejueo, leaving data from four speakers for analysis. I conducted the interviews in elderly community centers and the homes of participants. In addition to recording conversations, I collected demographic material on each of the speakers' hometown, their parents' hometowns, age, education and work experience and time spent in geographic locations. I transcribed a five-minute slice of data 15 minutes into the elicitation session for each of the speakers.

With data from the two speech communities along with philological research on Jejueo, MSK and Korean dialects, I located phonological, morphological and lexical distinctions between the two sets of data in order to separate potential innovations or conservative features from individual variation amongst the speakers. I also noted patterns of code mixing and code switching between Korean, Jejueo and Japanese in the data.

After identifying the target variables, I listened again to the full recording of the elicitation session for each participant in order to obtain more accurate results for these variables and determine which were shared between participants and to what degree. The target features

fall into three categories: phonological variables (Table 24), grammatical suffixes (Table 25) and lexical items, including question words, deictics, intensifiers and kinship terminology (Table 26). The target features that were produced with the greatest frequency are listed below. Tables 24-26 below show the Jejueo form in the first column and the Korean dialectal forms in the second column. In the column marked *Korean*, I give the MSK form on the left and the dialectal reflex on the right, where there is any difference.

feature	**Jejueo**	**Korean**	**gloss**
low back rounded vowel	/ɔ/	∅	
palatalization	[tɕimtɕʰi]	[kimtɕʰi]/ [tɕimtɕʰi]	'kimchi'
glide deletion after consonant	[mun/men]	[mjʌn]/ [/men]	'if/when'

Table 24. Phonological variables of Jejueo found in Jeju and Osaka data

Jejueo	**Korean**	**function**
-i/ti	*-e*	locative
-sinti	*-hante*	dative
-ŋ	*-ko*	verbal connector e.g."go-and"
-jʌŋ	*-raŋ*	comitative
-ms	*-ko*	present progressive
-ɨn	*-ʌss*	past
-je	*-jo*	word-final politeness marker
-hʌko	*-hako*	comitative clitic
-ʌsta	*-ʌpsta*	absence of (opposite of existential)

Table 25. Jejueo grammatical suffixes found in Jeju and Osaka data[12]

[12] I have not included transparent complex TMA suffixes in this table, such as the past progressive suffix, which is formed by attaching the past suffix to the right of the progressive suffix in both Jejueo and Korean (J: *-ʌms-in*; K: *-ko-ʌss*).

category	Jejueo	Korean	gloss
(de)intensifier	*mak* *hɔkkɨm*	*manhi* *tɕokɨm*	very/many a little
wh question	*musi/muse*	*ue*	why
kinship	*harmaŋ* *harɨpaŋ* *ʌmʌŋ* *apaŋ*	*harmʌni* *haraptɕi* *ʌmmʌ* *appa*	Grandmother Grandfather Mother diminutive Father diminutive

Table 26. Jejueo lexical items found in Jeju and Osaka data

6.2.2 Results

In general, Osakan Jejueo slows less evidence of an overall shift to MSK, resulting in the maintenance of lexical items that have been lost in Jeju. The Osakan variety of Jejueo also shows some interesting mixed forms that result from contact with Korean, demonstrating the ongoing development of changes in Osakan Jejueo. Less evident was the borrowing of Japanese material in Jejueo. Rather than the extensive codemixing we see with Korean and Jejueo in Osakan Jejueo, speakers, most of whom are fluent in Jejueo, Korean and Japanese, codeswitch to Japanese. I am defining codemixing here as borrowing L2 material into an L1 word or phrase, such as the mixing of Jejueo and MSK phonemes or morphemes within a word. I define codeswitching here as switching between two languages at the clausal boundaries of an utterance. The patterns of borrowing that showed clear evidence of Japanese influence were mostly restricted to borrowed Japanese numerals in a Jejueo construction, and the addition of Japanese discourse markers at the syntactic peripheries of Jejueo clauses, e.g. *ano*… ‘um’... A few participants produced almost entirely Japanese material (with borrowed Korean forms), and

this data was thrown out, as a trilingual analysis is beyond the scope of this dissertation (but a topic for future research).

As expected, speakers in Osaka maintained Jejueo phonological variables to a greater extent than speakers in Jeju, particularly in terms of the palatalization of obstruents. This could also be an effect of the variety of Korean that people are in contact with in Jeju, versus in Osaka. In Jeju, the presence of speakers from the mainland includes a high percentage of migrants from Seoul, a Korean variety that only palatalizes alveolar stops. In Osaka, most of the Korean speakers are speakers of Jeolla and Gyeongsang dialects, which palatalize all obstruents, as does Jejueo. An interesting finding in Osakan Jejueo was the vowel shape [ʊ] before a nasal, e.g. [mʊn] 'if', where speakers in Jeju have a [u] or [ɨ], e.g. [mun] or [mɨn]. A more focused study on Jejueo vowels in natural speech could determine whether this vowel shape is due to contact, individual variation, or if the vowel has been maintained in this community from an earlier stage of Jejueo. As I will discuss later in this chapter, the production of a greater variety of grammatical morphemes was evident in Osakan Jejueo and suggests that the Osakan variety of Jejueo is indeed more conservative than the Jejuan variety. The appearance of conservative Jejueo features in Osakan Jejueo does not mean that they are absent from Jejueo on Jeju Island. Given that my access to the Jejueo-speaking community ended abruptly with the global pandemic, more data from Jeju Island could potentially turn up different results and show that older, fluent speakers actually do produce features presently found only in Osaka.

6.3 Case study 2: Sociophonetic study in Jeju

In order to analyze current contact effects from MSK on Jejueo as it is spoken in the two communities, Jeju Island and Osaka, Japan, I examined phonological and morphological field data. The phonological data highlights the prosodic changes emerging in Jejueo as spoken by

three age groups of speakers, in an apparent time study. This study includes data from Jeju Island only—the next step is to gather prosodic data in Osaka to complete the picture of Jejueo sound change. I elicited data from three age demographics on Jeju Island: Jeju-Korean speakers age 18-30, Jeju-Korean or Jejueo speakers age 40-60, and Jejueo speakers age 75 and over. I recruited ten speakers in each age group on Jeju Island, including five females and five males. I used a Zoom H4N, a microphone with a sound equalizer to ensure that f0 is accurately captured in the low portion of the frequency spectrum. In running the experiment, the youngest two groups of participants were recorded in a sound booth in Jeju city, whereas for the oldest group of participants, my assistants visited individual homes or other quiet, convenient locations.

The experiment consisted of five separate tasks and took approximately 30 minutes to complete. The first three tasks are speech production tasks, and the final two tasks are quantitative and qualitative sociolinguistic profiling tasks. A native speaker of Jejueo conducted the entire experiment, in order to avoid accommodation or code-switching to Korean in the presence of a linguistic (and cultural) outsider (see Kim 2013).

6.3.1 Word list

I created a word list of near-minimal pairs in Jejueo, with five different tokens for each place of articulation across the three-way stop distinction in Jejueo. The word list contains 45 tokens in total. I created picture cards for the 45 words, where each card has a picture of the token on one side, and the orthographic representation on the other. In the initial familiarization phase, each participant read through the 45 cards aloud, and in the recording phase the participant looked at the picture sides of the cards, as he or she was recorded producing the word in the carrier phrase in 92 below. If participants did not memorize the picture as a prompt for production they were free to read the word; I noted which words were produced with and without

reading the prompt. My intention in providing a picture as the first elicitation prompt is to elicit the most "Jejueo-like" pronunciation of this primarily unwritten language. Jejueo does not yet have an orthography that fully accurately represents its phonological system, and is written with Korean orthography. Moreover, Jejueo was primarily unwritten until approximately 10-20 years ago (Yang 2013). Thus, reading Jejueo may be inconsistent with cultural expectations, particularly for the oldest generation of native speakers. Many speakers in this generation also grew up before education was a common resource on the island (Kim 2013) and may not be comfortable with reading tasks or may have problems with eyesight.

(92) *ḳok* _____ *(n/nɨn) tago/rako hɛ -su -ta*
surely _____ NMLZ QUOT do -FO.PST-DECL
"People surely said _____."

In order to avoid sentence-initial prosodic effects on VOT or f0, I placed the target word in a sentence-medial position. As voicing significantly affects VOT, I have eliminated the environment in which allophonic voicing occurs in Jejueo, by placing an adverb with a voiceless coda before the target word. I have included the word list in Table 27 below, which I reviewed with two Jejueo scholars, and with the use of a larger dictionary, to ensure that the tokens are relatively consistent in terms of frequency, being well-known by younger generations of speakers, are imageable on cards, and have equal numbers of voiced and voiceless codas. I arranged the tokens into semantic sets of cultural items, foods, animals and kinship terms in an attempt to prime speakers with cultural relevance in order to elicit more naturalistic data. My previous elicitation data suggests that the more formal the task and setting, the more Korean contact influence (phonetic, morphological, lexical, prosodic features) will be evident in the Jejueo speech production for all age groups (Saltzman 2014).

Using a Praat script I captured VOT, vowel length, and f0, as measured at 10% following

the onset of the vowel, at the midpoint, and 10% preceding the coda.

	bilabial	alveolar	velar
tense	p̪aŋt̪ʌk ‘bread’ p̪ada ‘squeeze’ p̪aneda ‘pull/pick out’ p̪aŋp̪aŋhɔda ‘bulging’ p̪atɕʰuta ‘make something fall into water’	t̪arabi orɨm ‘*oreum*[13] name’ t̪aŋkaŋseŋi ‘short legged dog’ t̪allida ‘boil down’ t̪ak ‘very’ t̪at̪ap̪ut̪ahɔta ‘argue’	k̪amegi ‘crow’ k̪abullegi ‘mischievous boy’ k̪ap ‘price’ k̪aʃi ‘fish bone, thorn’ k̪aŋneŋi ‘corn’
lenis	padaŋ ‘beach’ pakkʌri ‘front house’ pattam ‘stone fence’ paŋe orɨm ‘*oreum* name’ padatgwegi ‘fish’	tassui ‘5 days’ taŋ ‘shamanic shrine’ tagɨmbari ‘Jeju fish name’ tagellagtagellag ‘clattering’ tagtag ‘shivering’	kaltɕʌŋpeŋi ‘clothes’ kaŋseŋi ‘puppy’ kansehada ‘lazy’ kamdzʌ ‘sweet potato’ kaʃiʌmʌŋ ‘mother-in-law’
aspirated	pʰatɕʰi ‘unsellable fruit’ pʰadellakpʰadellak ‘flapping’ pʰant̪ɕik ‘everything’ pʰanpʰanhɔda ‘flat’ pʰannata ‘ruined’	tʰamna ‘Jeju Island’ tʰal ‘strawberry’ tʰada ‘pick’ tʰambaŋtʰambaŋ ‘swimming sound’ tʰabaktʰabak ‘tired walking’	kʰalkʰalsɨda ‘too bitter’ kʰada ‘burn’ kʰanne ‘burnt smell’ kʰakʰak ‘fish bone stuck in throat’ kʰak ‘hit, threaten to hit’

Table 27. Jejueo words included in Word List, experiment Task 1

6.3.2 Reading passage

With the assistance of a native speaker of Jejueo and a younger (semi)speaker, I drafted a short reading passage containing nine Jejueo words with word-initial stops across the three places of articulation and plosive categories. The words are equally high frequency words, found to be well-known by Jeju citizens through an informal online survey of younger speakers. Because Jejueo is a primarily unwritten language, the reading passage is a dialogue between two fictional speakers, and the theme encompasses culturally relevant semantic sets such as seafood, the ocean, geography, weather and fishing. The target words are placed phrase-medially in each sentence. In the familiarization phase, participants read through the passage on their own and

[13] An *oreum* is a parasitic volcano that looks like a large hill. There are more than 360 *oreum* on Jeju Island.

asked any questions they have to the assistant. The assistant then recorded participants reading the passage, which took approximately 2-3 minutes. The script of the reading passage is provided in the Appendix.

6.3.3 Bilingual Language Profile

The BLP (Birdsong et al. 2012) is a quantitative test aimed at capturing language dominance for bilinguals. This is a useful resource for speakers of Jejueo, as all current speakers are bilingual in Jejueo and Korean (UNESCO 2010). The youngest participant group also has significant exposure to English in school, and so in the final demographic survey I probed the nature of participants' experiences with other foreign languages. I have listed the data targeted by the 4 BLP modules in Table 5 below.

The BLP interprets language dominance across three linguistic domains: language history, language use and language proficiency. The bilingual participants in this study answered the same series of questions for Jejueo and Korean. Language dominance in each module of the BLP is captured quantitatively on a numerical scale, with 0 meaning weakest Jejueo usage, and the highest value meaning strongest Jejueo usage. The scales differ between the modules: language history is captured on a scale 0-20, language use through percentages out of 100 that translate to a numerical scale 0-10, and language proficiency on a scale 0-6. The scores for each module are then calculated so that each module receives equal weighting in the global language score, which is interpreted as language dominance, with Korean dominance as the negative end of the scale (maximum -176), and Jejueo dominance as the positive end (maximum +176).

biographical information	• Name • Age • Sex • Place of residence • Highest level of formal education
language history	• Age of acquisition • Age at which you became comfortable using each language • Years of schooling in each language • Years spent in a country or region where each language is spoken • Years spent in a family where each language is spoken • Years spent in a work or school environment where each language is spoken
language use	• Percentage of use in an average week with friends • Percentage of use in an average week with family • Percentage of use in an average week at school or work • How often you talk to yourself in each language • How often you use each language when counting
language proficiency	• How well you speak each language • How well you understand each language • How well you write each language • How well you read each language

Table 28. BLP task modules

The BLP interview was conducted by a native Jejueo-speaking assistant, and the task took approximately 10-20 minutes. After discussing the BLP task with Jeju colleagues, I modified one question in order to better reflect the linguistic ecology of Jeju and the bilingualism and language mixing in the home. Rather than asking, “How many years have you spent in a family that speaks [Jejueo/Korean]?”, assistants asked participants, “How many years did your family speak more [Jejueo/Korean]?” A second purpose of the BLP interview was to capture Jejueo language use in a more naturalistic setting, as a dialogue between two speakers.

6.3.4 Language attitudes Likert scale questionnaire

In order to probe speakers' language ideologies specific to the Jeju cultural domain, participants answered a short questionnaire and responded on a scale from 1-5, based in part on Yang's 2013 survey on Jejueo language attitudes across 6 age groups of speakers. This survey addressed how speakers' language attitudes relate to the future of Jejueo use on the island, by addressing specifically whether speakers intend to settle (see Edwards 1992) and what language(s) they hope their children will use. This task also served as a follow-up to Yang's (2014) survey in comparing the results of a larger pool of participants. I have included the full set of questions below.

1. Jeju language is an important part of Jeju identity.
2. Jeju language is an important part of my identity.
3. I plan to live on Jeju Island in the future.
4. I feel comfortable speaking in Jejueo.
5. I want my children to speak Jejueo.
6. Jeju language should be preserved/ revitalized.

Table 29. Language attitudes survey

6.3.5 Demographic survey

The final task in the experiment is a demographic survey aimed at investigating the language backgrounds of participants in greater detail. The questions in this survey were designed to locate participants diachronically in linguistic and social spaces potentially embracing multiple languages. The questions relate speakers' personal backgrounds to the historical data on Jeju demographic shifts, and the related tonal patterns produced on the island. Participants answered the assistant's qualitative questions about hometowns of their parents and

grandparents, their time spent off the island, their social networks, the languages they have studied, and the domains for their Jejueo use. The questions I included in the qualitative survey are below.

1. Where did you grow up?
2. Where are your parents and grandparents from?
3. What other languages do you know?
4. Have you lived off the island?
5. What academies have you gone to? (significant for level of education and social economic status for young people)
6. Do you have good friends who are not from Jeju?
7. Do you work or go to school with people from outside Jeju?
8. When do you usually use Jejueo?

Table 30. Qualitative demographic survey

Together, the three sociolinguistic profiling tasks offer the first in-depth study of young Jeju-Korean speakers' language ideologies and language use.

6.3.6 Results

For this study I analyzed data from six female[14] participants belonging to three age groups: younger, middle and older. Three participants grew up in rural villages of Jeju Island, and three grew up in the central city, Jeju City. Five of the six participants completed between 13 and 17 years of formal education in the Korean language. The remaining participant completed primary education with five years of formal training in Korean. In this study, the six participants cover the full spectrum in terms of age, education, daily time spent using Jejueo and domains of

[14] I have analyzed data from all 30 participants but have statistical data only from the 6 participants from the first round of the study.

use, and knowledge of Jejueo. I found that the three age groups pattern differently from each other in terms of both their acoustic production of the stop contrast in Jejueo, and their language attitudes about Jejueo. In short, the tonal change is complete for the youngest group: the VOT distinction between aspirated and lenis stops has conflated and a high/low tonal distinction between the two stop types has developed. The middle and older groups have developed the tonal distinction between stops but maintain the VOT distinction to different degrees. For the middle group, the VOT distinction between aspirated and lenis stops is approximately half of the VOT distinction produced by the older group, who maintain the VOT distinction that preceded tonogenesis in Korea. The three age groups also differ in terms of their language dominance and attitudes. The youngest group is overwhelmingly dominant in Korean, while the middle and older groups show more variation. Likewise, the language attitudes of the youngest group are shown to be notably less positive toward Jejueo than those of the middle and older groups, whose attitudes are positive for all criteria inquired upon. In the following two sections I discuss the results of this experiment; first I present the demographic and attitudinal data, and second, I present the phonetic data.

Below I present data gathered from the participants' BLP interview task and language attitudes survey.

Age Group	**Participant**	**Hometown**	**Education**
Younger (18-30)	Y1 Y2	urban urban	in college in college
Mid (30-50)	M1 M2	rural urban	college college
Older (50-70)	O1 O2	rural rural	college primary school

Table 31. Demographic information for participants

Age Group	Participant	BLP components						BLP score	
		History		Use		Proficiency			
		Korean	Jejueo	Korean	Jejueo	Korean	Jejueo	Korean	Jejueo
Younger	Y1	33	36	45	7	50	25	138	67
	Y2	35	37	24	30	66	16	125	82
Mid	M1	91	115	9	41	20	24	104	161
	M2	17	62	15	39	48	45	80	147
Older	O1	44	61	50	4	55	48	148	113
	O2	78	91	0	55	48	54	93	192

Table 32. BLP scores by domain of language dominance

As Table 32 shows, participants vary widely across the domains of language dominance assessed by the BLP questionnaire. O2 consistently demonstrates dominance in Jejueo, resulting from a great deal more experience speaking Jejueo and proficiency using it. Interestingly, though Y1 demonstrates a clear linguistic dominance in Korean, her language history scores are comparable for Korean and Jejueo; this is to be expected for a younger member of the Jejueo-speaking community, who experiences the near diglossia of language domains in Jeju, where Jejueo is used in the home and marketplace and Korean is preferred in education and media. Figure 11 below shows the overall language dominance for each participant, with Korean marked by negative values and Jejueo marked by positive values. Note that O2's results show a stronger dominance in Jejueo than Y1 shows in her dominance in Korean.

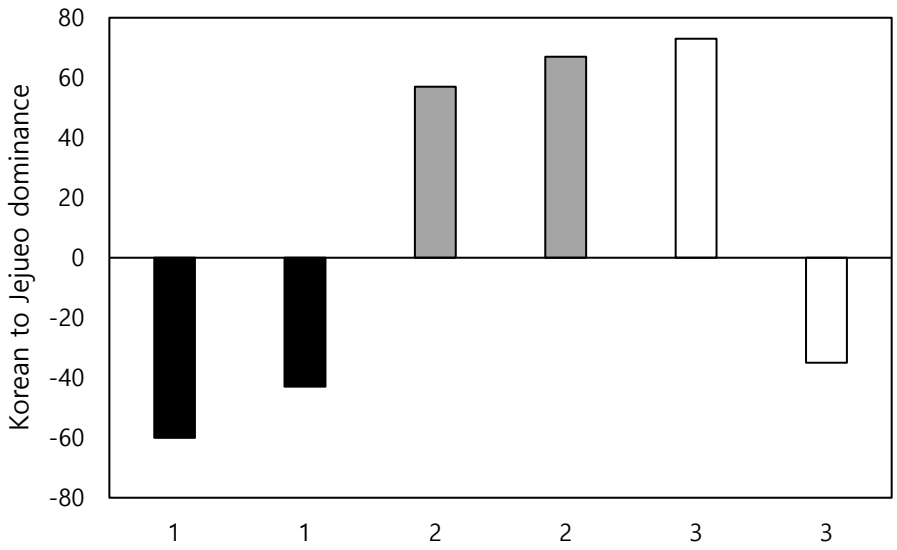


Figure 11. BLP language dominance scores. Negative values indicate Korean dominance, and positive values Jejueo dominance. Younger speakers are marked in black, the middle group in grey, and older speakers in white.

Table 33 below lays out the self-reported scores for the language attitudes survey, determined by a Likert scale, with 1 being the lowest, and 5 the highest.

	Y1	Y2	M1	M2	O1	O2
1. Jeju language is an important part of Jeju identity.	4	4	5	5	5	5
2. Jeju language is an important part of my identity.	4	2	5	5	5	5
3. I plan to live on Jeju Island in the future.	5	2	5	5	5	5
4. I feel comfortable speaking in Jejueo.	4	3	5	5	4	5
5. I want my children to speak Jejueo.	3	3	5	5	5	5
6. Jeju language should be preserved/ revitalized.	4	5	5	5	5	5

Table 33. language attitudes survey scores

As was typical for the age demographics interviewed in this experiment, O2 broadly demonstrates positive attitudes for Jejueo, while Y1's attitudes appear slightly more tentative. Note Y1's most negative score was given for the prompt, "I want my children to speak Jejueo".

This score was typically the lowest given in the survey by all participants in this age group, an unexpected result I will discuss in the next section of this paper.

6.3.6.1 Acoustic results

In this section I compared the three stop types in terms of VOT and f0 on the following vowel. If Jejueo shows contact effects from Korean on stop production, aspirated and lenis stops are predicted to have conflated VOT values, and higher versus lower f0 on following vowels, respectively. If there is no contact effect from Korean on Jejueo, Jejueo stops would be predicted to conserve the original Jejueo phonetic cues of aspirated stops having a longer VOT and lenis stops having a shorter VOT, with no distinctive tone on the following vowels. In this study 1,080 tokens were collected in equal numbers for each consonant type, but 22 aspirated velar stops, 14 aspirated bilabial stops and nine aspirated alveolar stops were excluded because either the following vowel had too small a duration to be accurately measured by Praat, or the following vowel was deleted by the speaker.

As hypothesized in this study, the phonetic data produced by participants shows that the older group maintains the VOT distinction between lenis and aspirated stops typical for native Jejueo speakers. Conversely, the younger participants demonstrate a merged VOT for lenis and aspirated stops across all places of articulation. In terms of a tonal distinction, all participants produced a difference in pitch between vowels following lenis stops (low pitch) and aspirated stops (high pitch), but this distinction was most pronounced in the youngest group. On average, Group 3 (Young) produced vowels following aspirated stops with a 40 Hz higher pitch.

In order to investigate the effect of consonant type and age on VOT, a linear mixed effect model was fit to the data in R, using the lme4 package (Bates et al. 2013). The model contained as fixed factors Age (Old/Mid/Young, reference category was Mid), consonant Type

(Tense/Lenis/Aspirated, reference category was Tense), and their interaction. Random intercepts by Speaker and Word were included. Table 34 contains the results of this model.

	Estimate	Standard Error	*t*-value
Fixed effects:			
(Intercept)	0.077	0.005469	14.107
Age: Older	0.029	0.007619	1.795
Age: Younger	0.030	0.007587	1.981
Type: Lenis	0.030	0.003853	-1.806
Type: Aspirated	0.041	0.003973	-1.253
Age: Older x Type: Lenis	0.023	0.005265	-0.060
Age: Younger x Type: Lenis	0.008	0.005108	-1.521
Age: Older x Type: Aspirated	0.0179	0.005555	3.235
Age: Younger x Type: Aspirated	0.0048	0.005318	0.897

Table 34. Results of model investigating the contribution of consonant Type and speaker Age on VOT.

Following Baayen (2008:74), a *t*-score more than 2 units away from zero is interpreted as significant. The model found a significant interaction between consonant VOT and Age, meaning that the relationship between consonant Type in terms of VOT differs for the different Age groups. In order to investigate these interactions further, Figure 12 plots the VOT for the different consonant Types by Age group.

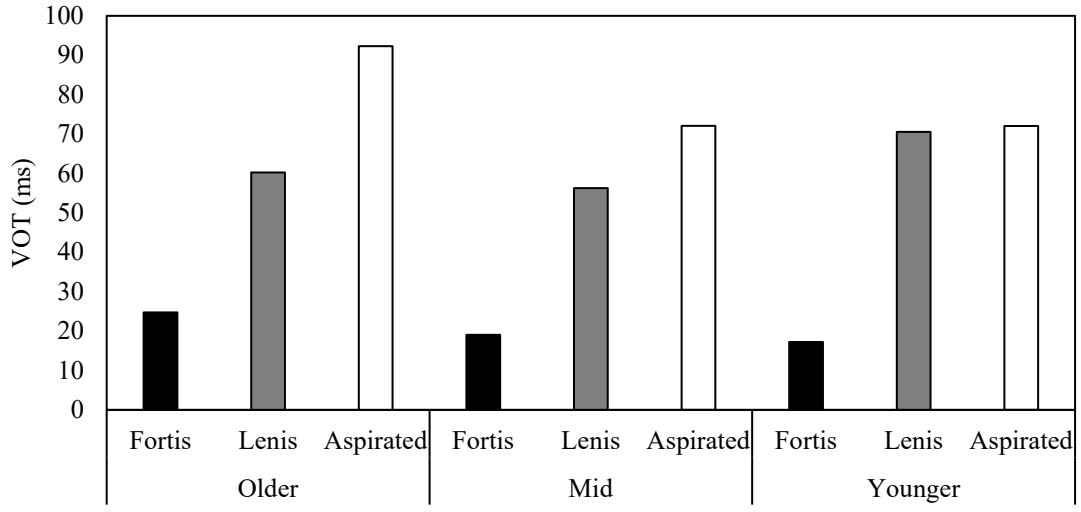


Figure 12. VOT by consonant Type and Age group

As inspection of Figure 12 shows, the VOT of tense plosives is shorter than that of lenis and aspirated plosives for all three age groups. The figure also shows that further VOT is shorter for lenis than aspirated plosives for the older and mid group, but not for the younger group.

To investigate the effect of consonant type and BLP score on VOT, a linear mixed effect model was fit to the data in R, using the lme4 package (Bates et al. 2013). The model contained as fixed factors BLP, consonant Type (Tense/Lenis/Aspirated, reference category was Tense), and their interaction. Random intercepts by Speaker and Word were included. Table 35 contains the results of this model.

	Estimate	Standard Error	*t*-value
Fixed effects:			
(Intercept)	0.1065249	0.0079811	13.347
BLP	-0.0198268	0.0113546	-1.746
Type: Lenis	-0.0393805	0.0027668	-1.233
Type: Aspirated	-0.0437905	0.0029793	-1.698
BLP x Type: Lenis	0.014	0.0042172	3.296
BLP x Type: Aspirated	-0.0007	0.0044296	-0.156

Table 35. Results of model investigating the contribution of consonant Type and BLP on VOT

The model found significant interactions between consonant VOT and BLP, meaning that the relationship between consonant Type in terms of VOT differs according to BLP scores. In order to investigate these interactions further, Figure 13 plots the VOT for the different consonant Types by BLP score, wherein the higher an individual's BLP score is, the greater the difference is in VOT between aspirated and lenis stop categories.

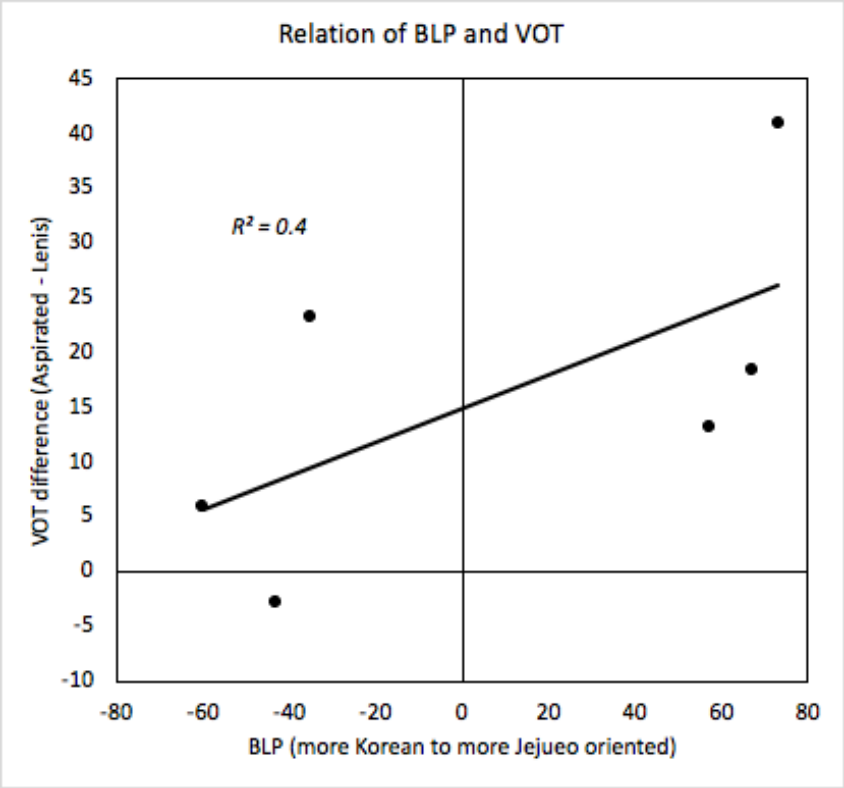


Figure 13. VOT by consonant Type and BLP score

Figure 13 shows a trend wherein greater language dominance in Jejueo correlates with a larger VOT distinction between stop consonants.

To investigate the effect of consonant type and language attitudes on VOT, a linear mixed effect model was fit to the data in R, using the lme4 package (Bates et al. 2013). The model contained as fixed factors Attitude, consonant Type (Tense/Lenis/Aspirated, reference category was Tense), and their interaction. Random intercepts by Speaker and Word were included. Table 36 contains the results of this model.

	Estimate	Standard Error	*t*-value
Fixed effects:			
Intercept	0.140	0.03103	4.499
Attitude	-1.424	1.01753	-1.400
Type: Lenis	-0.059	0.01101	-1.392
Type: Aspirated	-0.035	0.01096	-1.227
Attitude x Lenis	0.087	0.36569	2.399
Attitude x Aspirated	-0.013	0.36622	-0.850

Table 36. Results of model investigating the contribution of consonant Type and Attitude on VOT

The model found a significant interaction between consonant VOT and Attitude, meaning that the relationship between consonant Type in terms of VOT differs according to the degree of speakers' positive or negative attitudes toward using Jejueo. In order investigate these interactions further, Figure 14 plots the VOT for the different consonant Types by Attitude.

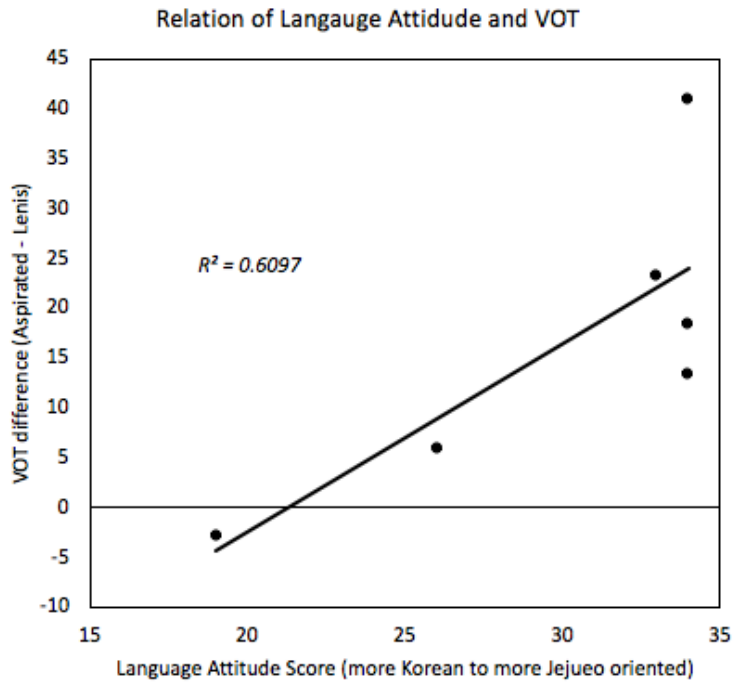


Figure 14: VOT by consonant Type and Attitude

As in Figure 13, there is a positive correlation between attitude (more Jejueo oriented) and a

larger VOT difference between aspirated and lenis plosives). This means that the more Jejueo oriented speakers are more likely to maintain a VOT contrast. The *r*2 value for this correlation is 0.61, but again the correlation is not significant due to the small number of observations ($p < 0.07$).

To investigate the effect of consonant type and age on f0, a linear mixed effect model was fit to the data in R, using the lme4 package (Bates et al. 2013). The model contained as fixed factors Age (reference category was Mid), consonant Type (Tense/Lenis/Aspirated, reference category was Tense), and their interaction. Random intercepts by Speaker and Word were included. Table 37 contains the results of this model.

	Estimate	Standard Error	*t*-value
Fixed effects:			
(Intercept)	217.9	7.742	28.155
Age: Older	-2.3	10.842	-0.214
Age: Younger	7.6	10.802	0.702
Type: Lenis	-27.9	4.580	-6.089
Type: Aspirated	30.5	4.770	6.398
Age: Older x Type: Lenis	-10.8	6.296	-1.719
Age: Younger x Type: Lenis	11.4	6.073	1.871
Age: Older x Type: Aspirated	-20.4	6.692	-3.047
Age: Younger x Type: Aspirated	4.3	6.347	0.674

Table 37. Results of model investigating the contribution of consonant Type and speaker Age on f0

The model found a significant main effect of consonant Type, with Lenis plosives predicted to have an f0 that is on average 27.9 Hz lower than tense plosives, and Aspirated plosives predicted to have an f0 that is on average 30.5 Hz higher than that of Tense plosives. Most relevant to the hypotheses of the current study, there are significant interactions between Aspirated f0 and Age for the older group, who on average produce aspirated stops at 20.4 Hz lower than other consonants and other age groups. In order investigate these interactions further, Figure 15 plots

the f0 for the different consonant Types by Age group.

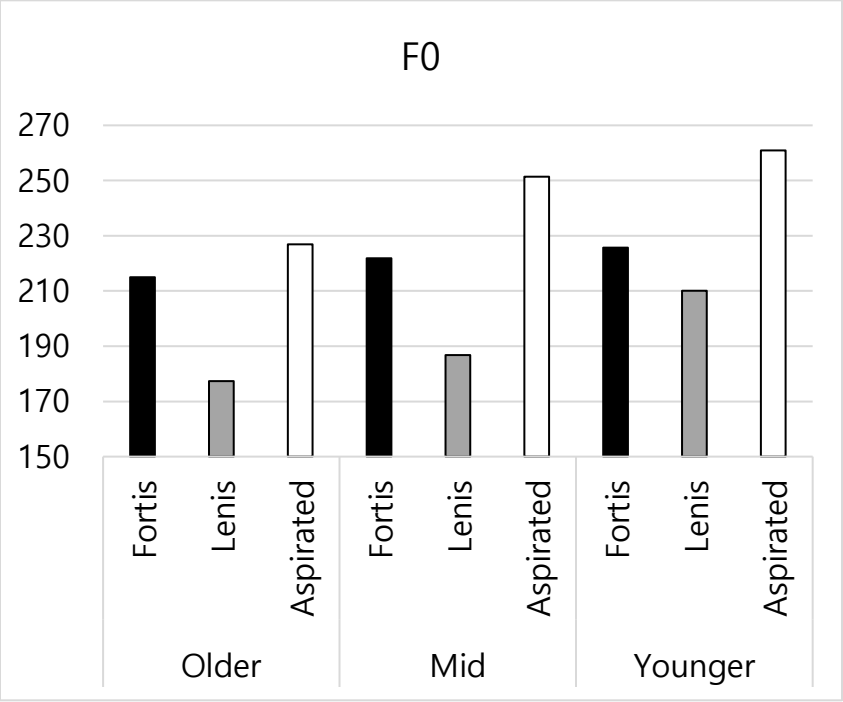


Figure 15. f0 by consonant Type and age

The results of my experiment challenge both the phonetic results presented by Cho et al. (2002) for VOT distinction and the attitudinal results presented by Yang (2014) on Jejueo language attitudes. The results of this study suggest that younger generations living on Jeju Island have completed a sound change equal to the tonogenesis spreading from Seoul, wherein lenis and aspirated stops have distinctive tone, and the difference in VOT for these stop types is eliminated. Conversely, the older groups demonstrate their maintenance of the full VOT distinction in Jejueo, as reported by Cho et al. (2002). The middle and older groups, however, also produce a tonal contrast for vowels following lenis and aspirated stops, to varying degrees. The middle group produces a smaller tonal distinction between vowels following lenis and aspirated stops than the young group, and the older group produces an even more narrow difference in f0. The results of this study show that Seoul-based tonogenesis has entered Jejueo,

and that Jejueo gains an allophonic difference in f0 before the VOT distinction is lost, as Groups 2 and 3 maintain VOT and tonal cues for the 3-way stop distinction.

Previous studies report that the tonal distinction in Seoul emerged before a distinction in VOT was lost (Kang 2014). Silva (2006), however, did not find any age effect on the pattern of f0 distinction in stop categories and states that "the tonal pattern has been stable over time". Oh (2011) did not find any gender effect on the realization of f0 distinction (in semitone scale) in aspirated and lenis stops and concludes that loss of VOT distinction in females is not compensated by increased difference in the f0 dimension. These studies suggest that f0 distinction has been in place for quite some time and well ahead of VOT merger. In a perceptual study Kang and Guion (2008), on the other hand, found that older Korean speakers only rely on the VOT dimension to enhance aspirated-lenis contrast, while younger speakers, who tend to merge VOT of the two stop categories, use both the VOT and f0 dimensions, indicating a change in the status of f0 in the contrast.

The results of this study align with the cline of stages of tonogenesis presented in Maran (1973). In this model of sound change, the production of contrasts in stop consonants aligns with one of the five following stages. Stage 1: VOT only, with no f0 distinction; Stage 2: emergence of redundant f0 distinction; Stage 3: full redundancy; Stage 4: weakening of VOT distinction and the further enhancement of f0 distinction; Stage 5: loss of VOT distinction. The model is presented visually in Figure 16 below.

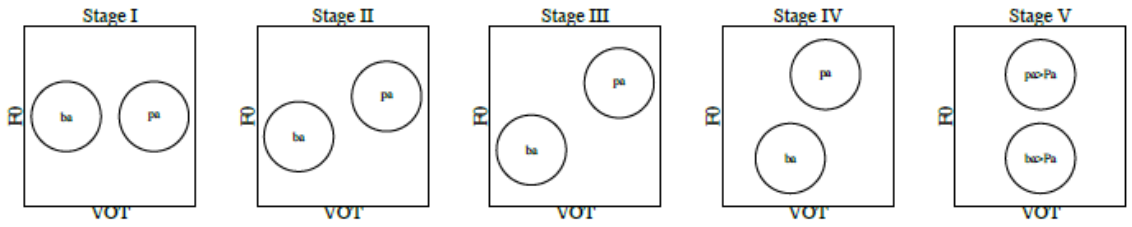


Figure 16. Five stages of tonogenesis (Maran 1973)

In this study the older group falls in line with Stage 2 or 3 of the model, the middle group with Stage 3 or 4, and the younger group with Stage 5. Relying on production data of stop consonants with no perceptual data, it is clear that speakers align with varying stages of Maran's model of tonogenesis, but it is as yet unknown how the middle and older groups weight perceptual cues.

6.3.6.2 Language attitudes and Bilingual Language Profile

The results of the Jejueo language attitude survey suggest a shift from Yang's conclusion in his 2014 survey. While Yang's data (Figure 5) suggests a three-generation attitudinal pattern toward the heritage language, the data presented here shows that the young group has the least positive attitudes toward Jejueo, as in 17 and 18 below. In Figures 17 and 18 the x-axis represents the three age groups participating in this study, while the y-axis represents attitudes toward Jejueo use on a Likert-scale, where 1 is negative and 5 is positive.

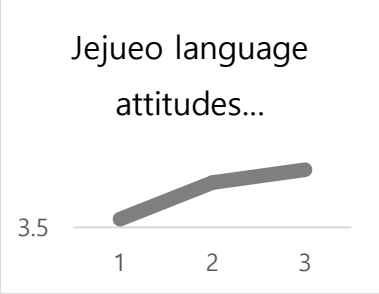


Figure 17. "How interested are you in children using Jejueo?"

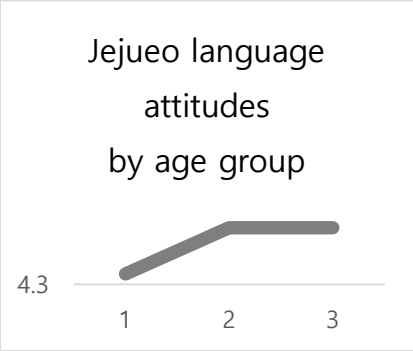


Figure 18. “Do you think that the preservation of Jejueo is important?”

The loss of distinction in VOT between lenis and aspirated stops by the young group correlates with lower scores on the language attitude survey and lower BLP scores. As all participants produce an f0 distinction between the three stop types, the correlation between f0 and language attitudes, and f0 and BLP is not significant. However, this study finds that the interaction of language attitudes and BLP is significant, and trends with the maintenance or loss of a VOT distinction in stops.

With statistical data from only six speakers in this study, it is clear only that language dominance and language attitudes correlate with Jejueo stop production, but not to what degree each of the extralinguistic variables correlates with the intralinguistic variables. A statistical analysis of the remaining 20 speakers in this experiment will provide adequate data to ask the larger questions of how language history, dominance, social networks and attitudes may support a tonal change or spread it more quickly throughout a speech community.

This study presents the results of an apparent-time sociophonetic study of the development of a tonal distinction in Jejueo. It shows that tonogenesis has spread outward from mainland Korea and appears to have entered Jejueo for all speakers, but to varying degrees,

based on extralinguistic factors of age, language dominance in Korean and Jejueo, and language attitudes toward Jejueo. This study contributes to the discussion of language attitudes on Jeju Island, showing that the status of Jejueo is somewhat diminished for the younger generation of Jejueo speakers, contrary to previous studies. This study also adds to the Jejueo literature, in that it is the first study to document language use by younger generations of speakers. This study adds to the literature on Korean tonogenesis by demonstrating that a tonal distinction has entered Jejueo, the second Koreanic language, through the process of f0 raising and lowering for vowels following aspirated and lenis stops, respectively, and eventual conflation of VOT for these stops, outlined by Kang (2014). Finally, this study provides implications for the literature on language loss and sound change, as language dominance and attitudes are shown to contribute to phonological attrition of heritage language in a disglossic environment. A significant amount of individual variation was found in this study, in terms of both the phonetic production of stop consonants and variation in individuals' language history, social networks and dominance as captured by the BLP, and language attitudes. This variation provides input for a future study where data from larger numbers of speakers can determine the impact Jejueo language dominance and attitudes have on sound change in the two speech communities.

6.4 Case study 3: Morphosyntactic study in Jeju and Osaka

To capture current morphological developments in Jejueo resulting from sustained contact with MSK I conducted field work both on Jeju Island and in Osaka, Japan in 2013. I conducted short, structured elicitation sessions with 25 native speakers in Jeju and 25 native speakers in Osaka of varied age groups. Both genders are represented, but women make up approximately 75% of those interviewed in Osaka, as there are fewer elderly male speakers of Jejueo in that community. Age ranges from 30 to over 85 and the range is equally distributed in

both groups. The visual and written elicitation tools used in this study were of my own design. Participants were shown two picture prompts, and for each picture participants heard four Korean constructions related to the image, in declarative, interrogative, hortative and imperative moods. After each Korean construction was read by a native Korean-speaking assistant, participants were asked to give a similar construction that described the image in Jejueo. Two of the picture prompts were designed to elicit a ditransitive verbal construction and a possessive marker, as well as honorific lexical items and morphemes for both agent and goal roles. Although Jejueo and Korean share about 20-25% of their lexicons (Yang 2013), the picture prompts in this study were intended to elicit only Jejueo items not shared by Korean.

Picture prompt 1 shows an elderly woman picking fruit with a young girl. This image is designed to elicit a transitive verb construction, comitative and locative markers, and standard and honorific co-agents. Picture prompts 2 and 3 show a young boy and elderly man, respectively, slipping off of a building. Prompts 2 and 3 were designed to elicit an intransitive verb construction, a directional case marker and honorific lexical items and functional morphemes. Picture prompts 4 and 5 show a teacher giving her books to a student, and a student giving his books to a teacher, respectively. Prompts 4 and 5 were designed to elicit a ditransitive verbal construction and a possessive marker, as well as honorific lexical items and morphemes for both agent and goal roles. Although Jejueo and MSK share a number of lexical and grammatical forms, the picture prompts in this study intended to elicit only Jejueo items not shared by MSK. The elicitation tools are provided in the appendix.

In the following section I describe the results from this study that showcase the key differences in morphological borrowing patterns for the 25 Jejueo speakers in Jeju and the 25 Jejueo speakers in Osaka.

6.4.1 MSK verbal roots with Jejueo verb-final suffixes

For speakers in the Jeju community, the production of complex verbs containing elements taken from both MSK and Jejueo is quite frequent. In Jeju, Jejueo verb-final suffixes are most often attached to MSK verbal roots. Only 12% of speakers in Jeju produced a Jejueo verbal base for the verb 'pick' in any grammatical mood. However, 75% of speakers used Jejueo verb-final suffixes. The construction in example 93 is composed entirely of MSK forms excepting the agent, Jejueo honorific lexical item *harmaŋ* 'grandmother' and the sentence-final suffixes *isu-ta* EXIST.FO-DECL. This production of apparently non-fluent Jejueo suggests that the speaker is a Jejueo L2 speaker and is borrowing *harmaŋ* 'grandmother' and the verbal ending *isuta* into an MSK construction.

*MSK forms in bold

(93) *harmaŋ* ***-hako sonjʌt̪al -i patʰ-esʌ kjul -il t̪a -ko***
grandmother-**CONJ granddaughter-NOM field-LOC orange-ACC pick-PROG**
isu -ta
EXIST.FO[PRS]-DECL
'The grandmother and granddaughter are picking oranges in the field.'

Among Jejueo speakers in Jeju, 58% of speakers produced a Jejueo verbal root for 'slip' in all grammatical moods. Of these constructions, 96% have Jejueo TMA and discourse suffixes attached to the MSK or Jejueo verb stem. The examples below feature three different MSK synonyms for 'slip', but all follow the pattern of attaching Jejueo verb-final suffixes to the root. Example 94 is less common than 95 or 96, in that the construction is fluently Jejueo, borrowing only the MSK verb stem. Because the three examples are taken from the Jeju community, 94 demonstrates use of a MSK verb stem *miḳ̟urʌtɕi* 'slip' that results from extensive contact with the dominant language; the stem *miḳurʌtɕi* was not produced by speakers in Osaka.

*MSK forms in bold

(94) *sontɕi -ka tɕip -u -tisʌ* ***miḳurʌtɛʌ****msu-ta*
grandchild-NOM house-over-LOC **slip.**FO[PRS] -DECL
'The grandchild is slipping off the house.'

(95) ***sontɕa -ka tɕipuŋ -esʌ nʌmʌtɕi-ko*** *isu -ta*
grandchild-NOM roof -LOC slip -PROG EXIST.FO[PRS]-DECL
'The grandchild is slipping off the roof.'

(96) ***sontɕa -ka oksaŋ-esʌ*** *ṭʌlʌtɛʌ-m -su -kaŋ*
grandchild-NOM roof -LOC slip -IND-FO[PRS]-Q
'Is the grandchild slipping off the roof?'

In this study Jejueo speakers in Jeju never produced the Jejueo verb stem for 'give' *anneta* in any grammatical mood, producing instead the common MSK verb stem *tɕu.* However, when suffixing a declarative mood suffix to this stem, 83% of speakers produced the Jejueo TMA suffixes. In imperative, interrogative and hortative constructions, 100% of speakers in Jeju attached Jejueo TMA suffixes. The difference is likely due to the high degree of similarity between Jejueo and MSK declarative progressive forms of 'give'. When two variants are as phonetically similar as Jejueo *tɕuko-isuta* 'giving' and MSK *tɕuko-iṣ̈ta* 'giving', speakers in the Jeju community often produce the MSK variant.

Speakers in Osaka had consistently higher rates of producing Jejueo verb stems along with Jejueo TMA and discourse verb-final suffixes. For the verb meaning 'pick', 56% of speakers produced the native Jejueo verb stem *tʰa* over the MSK verb stem *ṭ̈a,* 44% more often than speakers in Jeju. In Osaka, 92% of speakers suffixed native Jejueo suffixes to these verb stems, 14% more often than speakers in Jeju. The Osakan speaker in example 97 borrows

phonetic segments and morphemes from MSK, where the MSK and Jejueo forms are cognate and only minimally phonetically distinct: in the MSK verb, a tense unaspirated /t/.

*MSK forms in bold

(97) *harmaŋ* ***-ha****kok sontɕi* ***-ha****kok mi̥kaŋ* ***t̪a*** ***-****m* *-sinke*
grandmother-CONJ grandchild-CONJ orange **pick**-IND-PLN.PROG-DECL
'The grandmother and grandchild are picking oranges.'

In constructions with the verb 'slip', 72% of speakers in Osaka produced one of the several Jejueo verb stems, 14% more than did in Jeju. In Osaka, 92% of speakers suffixed Jejueo suffixes to MSK or Jejueo stems meaning 'slip', slightly less than in Jeju. Production of the verb *anne* 'give' breaks the borrowing pattern of the Osaka speakers. First, most speakers produced the MSK form *tɕu* 'give', due to the general shift from Jejueo *anne* 'give' to MSK *tɕu* 'give' over the last 40 years. Furthermore, production of Jejueo *anne* differed slightly depending on the arguments of the verb, due to the language attitudes of fluent speakers. When 'teacher' was the agent of the verb and 'student' was the goal, speakers in Osaka used the MSK verb stem *tɕu* 100% of the time. However, unlike in Jeju, when speakers produced the Jejueo constructions that featured 'student' as agent and 'teacher' as goal, verbal preference altered slightly. For these constructions, 23% of speakers in Osaka produced the Jejueo verb stem *anne*, while 96% attached Jejueo verb-final suffixes. Older native speakers of Jejueo who have *anne* in their repertoire may not find the verb suitable for use when the agent of the verb is an honorific item within the educational genre, but for a common NP in this genre *anne* is suitable. In example 98 the teacher is in the role of agent and the student is the goal, prompting use of MSK verbal stem *tɕu* 'give'. In this construction it is also likely that a lack of fluency in Jejueo motivates borrowing *tɕu*, as is suggested by the speaker's borrowing several MSK grammatical suffixes.

The construction in 99 has Jejueo verb stem *anne*, its production motivated by fluency in Jejueo and 'student' taking with role of agent, with 'teacher' as goal.

*MSK forms in bold

(98) ***i haksɛŋ-eke sʌnsɛŋ-ii tɕʰɛk-ɯl tɕu -ko*** *i*
PROX.DEM student-DAT teacher-POSS book-ACC give-PROG EXIST
-ʈ̪ɕʌ
-PLN[PRS]DECL
'The teacher is giving her books to the student.'

(99) *hoksɛŋ-i -jaŋ ʈ̪ɕɛk-ɨl -jaŋ* ***sʌnsɛŋ-nim*** *-hantʰi annejʌ-m -su*
student-NOM-DM book-ACC-DM **teacher-HON**-DAT give-IND-FO[PRS]
-ta
-DECL
'The student is giving books to the teacher.'

6.4.2 Jejueo verbal roots with MSK verb-final suffixes

The alternate side of this pattern, marking Jejueo verb stems with MSK verb-final suffixes, is not evident in the data, owing to the fact that verb-final markers are particularly salient in the production of Jejueo constructions, and speakers who can produce Jejueo verb stems tend to be consistent in their production of other Jejueo variables. As the Jeju community showed less fluency overall, those speakers who were able to produce the Jejueo verbs stem attached to them the more salient Jejueo verbal suffixes. There is no evidence of Jejueo speakers in Jeju attaching MSK TMA or discourse register suffixes to Jejueo verbal bases. Likewise, in Osaka there is little evidence of this borrowing pattern. Interestingly, elderly speakers in the Osaka community on three occasions followed Jejueo verbal stems with the MSK progressive suffix *-ko* and the MSK variant for the copula *iʂ̪* and suffixed to it plain register declarative or interrogative mood suffixes, as shown in 100, 101 and 102 below. The other speakers used the

Jejueo continuative ending *-(ʌ)ms.*

*MSK forms in bold

(100) ***harmʌni*** ***-hako*** *sontɕi* ***-hako*** ***niŋkim-il*** *tʰa* ***-ko***
grandmother -CONJ grandchild**-CONJ** **apple** **-ACC** pick**-CONT**
iʂ̻ ***-ta***
EXIST[PRS]-DECL
'The grandmother and grandchild are picking apples.'

(101) ***harmʌni*** ***-hako*** *sontɕi* *-ka* *miʂ̻kaŋ* *-il* *tʰa* ***-ko*** ***iʂ̻***
Grandmother-CONJ grandchild-NOM orange-ACC pick-**PROG EXIST[PRS]**
-ne
-EMP[Q]
'Is the grandmother picking oranges with the grandchild?'

(102) *sontɕi* *-ka* *pʰutʌtɕi* ***-ko*** ***iʂ̻*** ***-ta***
grandchild-NOM fall **-PROG EXIST[PRS]-PLN.DECL**
'The grandchild is falling.'

Most Koreanic linguists recognize seven distinct cases in the Koreanic languages (Lee and Ramsey 2011), including three syntactic cases, nominative, accusative and genitive, as well as the delimiter cases locative-allative, instrumental, comitative and vocative (O'Grady 1991, Sohn 1999). These grammatical cases are marked by suffixes, except for the genitive in Jejueo. Although MSK and Jejueo have unique case suffixes, the languages also share several suffixes, as can be seen in Table 38 below.

case	Jejueo	MSK
nominative	*-i/-ka*	*-i/-ka*
accusative	*-ɨl/-lɨl*	*-ɨl/-lɨl*
genitive	Ø	*-ɨi/*
allative/ dative	inanimate *-(t)i* 'to' *-sinti* 'to', *-antʰi* 'to', *-apʰi* to', *-re* 'to', *-tɨre* 'to', *-antʰɨre* 'to'	inanimate *-e* 'to' animate *-eke* 'to' (formal), *-hantʰe* 'to' (informal)
locative	*-(t)i* 'at', *-(t)isʌ* 'at, in'	*-e* 'at,' *-esʌ* 'at, in'
instrumental/ directional/ ablative	*-(tɨ)re* 'with, by, to, toward' *-esʌ* 'from'	*-(ɨ)ro* 'with, by, to, toward', *-esʌ* 'from'
comitative/ connective	*-jʌŋ* 'with', *-waŋ/-kwaŋ* 'with', *-hʌko(k)* 'with, and'	*-oa/-koa* 'with', *-raŋ* 'with', *-hako* 'with, and'
vocative	*-(j)a*	*-(j)a*

Table 38. Jejueo and Korean case suffixes. Some case suffixes are used in several overlapping roles.

Syntactic case suffixes can stack with delimiter case suffixes (O'Grady 1991), e.g. *harmaŋ-i-jʌŋ* grandmother-NOM-COM 'with grandmother'.

The following examples collected from speakers in Osaka illustrate the case categories in Jejueo. Example 103 is a typical construction featuring the comitative case suffix *-hʌko* 'with' as well as locative case suffix *-ti* 'to, in'.

*Jejueo case suffixes in bold

(103) *harmaŋ* ***hʌko*** *sontɕi* ***-ka*** *patʰ* ***-ti*** *-kaŋ* *mik̟aŋ* *t̟a* *-m*
grandmother-**CONJ** grandchild-**NOM** field-**LOC**-AUX orange pick-IND
-t̟ɕʌ *-ke*
-DECL[PRS]PLN-ADV
'The grandmother and grandchild are picking oranges in the field.'

This study captured no instances of the Jejueo instrumental/ablative case suffix *-tɨre* 'from, by'. Productions of *-tɨre* in the data are suffixed to *sin* or *an* in dative markers *-sintɨre* 'to' and *-antʰɨre* 'to'. Example 104 is a construction from Sohn (1999:75) which features Jejueo ablative case marker *-re* 'to' suffixed to wh-word *-ʌtɨ* 'where' in a typical Jejueo interrogative construction.

(104) *ʌtɨ* ***-re*** *ka-m -su -k̟oa*
where-**ABL** go-IND-FO[PRS]-Q
'Where are you going, sir?'

Example 105 has a Jejueo vocative case suffix, a dative case suffix and an accusative suffix in a complex construction meant to save face when making an honorific agent the argument of an imperative verb.

(105) ***a*** *haksɛŋ* ***-antʰi*** *tɕʰɛk-**ɨl*** *tɕuʌ-to tɕo -ɯnja*
VOC student-**DAT** PROX.DEM book-**ACC** give-AUX good-PLN[PRS]TAGQ
'Hey, it would be good to give the student this book, wouldn't it?'

Example 106 uses the method of suffixing honorific verb-final discourse suffixes to negotiate the same task of relating imperative mood to an honorific agent. This example features juxtaposition between possessor and possessum to mark genitive case, and the dative marker *-apʰi* 'to' < Jejueo postposition *apʰ-i* in.front-LOC.

(106) ***sʌnsɛŋ-nim*** ***tɕʰɛk*** *haksɛŋ-**apʰi*** *tɕuʌ-pupsʌ -ke*
teacher-HON book student-**DAT** give-FO[PRS]IMP-ADV
'[Please] give your book to the student.'

Example 107 has the Jejueo vocative case marker *-ja*, the nominative case marker *-i*, and the comitative case suffix *-jʌŋ*.

(107) *sontɕi* ***-ja*** *harmaŋ* ***-i*** ***-jʌŋ*** *ka-kɯneŋ mik̟aŋ t̟a -o*
grandchild-**VOC** grandmother-**NOM-COM** go-PURP orange pick-AUX
-ra
-IMP[PRS]PLN
'Hey, grandchild, go pick apples with Grandmother.'

Suffixes are less likely to be borrowed into Jejueo than forms higher up in the grammatical structure, such as lexical items. The data suggests that one of the last forms to show interference from MSK in the language contact situation is monosyllabic case suffixes, such as the comitative case suffixes *-kwa* 'with' and *-jʌŋ* 'with'. The distinction between the Jeju and Osaka communities is clear in the production of these case suffixes. In Osaka, about 50% of

speakers, regardless of demographic, produce the Jejueo comitative case markers when suffixing comitative case suffixes to animate NPs. In Jeju, only speakers over age 70 produce the Jejueo comitative suffixes, but these speakers do so consistently.

Because case suffixes are less likely to be borrowed than forms higher up in the grammatical structure of the dominant language, the use of Jejueo rather than MSK locative, directional and genitive suffixes is a fairly clear indicator of fluency in Jejueo. In Osaka about 50% of speakers use Jejueo comitative and locative case suffixes, while the majority of speakers in Jeju produce MSK comitative and locative suffixes. Example 108 shows the production of MSK case suffixes in declarative constructions, with the MSK comitative case suffix *-kwa* 'with' in what is primarily an MSK construction. The speaker in 108 may be an MSK L1 speaker, as the grammatical suffixes are MSK, and the speaker produces the MSK variant of the cognate verb stem *t̪a* 'pick'.

*MSK forms in bold

(108) *harmaŋ* ***-kwa*** *sontɕi* *-ka* *miḵaŋ* *-il* ***t̪a*** ***-go*** ***iṣ̪*** ***-ʌjo***
grandmother-**COM** grandchild-NOM orange-ACC **pick-PROG EXIST-DECL[PRS]** **-POL**
'The grandmother and grandchild are picking oranges.'

6.4.3 Dative case suffixes containing elements from MSK and Jejueo

Jejueo speakers in both communities showed a tendency to borrow MSK elements into disyllabic case markers. The resulting blended suffixes are highly variable in their construction and frequency of use, depending on speakers' fluency in Jejueo, the etymology of the suffix, and the semantic symmetry between cognate items. Borrowing from the dominant language into Jejueo case markers typically consists of replacing one syllable of a Jejueo case suffix with a syllable borrowed from the cognate MSK case suffix, which differs minimally in phonetic

features. One example is the production of the Jejueo dative case suffix -*ant^{h}i* 'to' as -*hant^{h}i* and -*ant^{h}e*, based on interference from MSK dative marker -*hant^{h}e* 'to'. Such blended suffixes, as with other case suffixes containing elements from Jejueo and MSK, reflect borrowing into either the initial or final syllable of the Jejueo suffix. For some case markers interference from MSK is particularly common, and speakers produce these suffixes with elements from Jejueo and MSK more often than they produce the native Jejueo suffixes on which they are based. The Jejueo suffixes that follow this pattern are dative suffixes which have undergone grammaticalization from locative suffixes. This suggests that the origin of these dative markers as postpositions influences borrowing patterns in both communities. Forms that grammaticalized from postpositions containing two morphemes are more vulnerable to borrowing from MSK than non-derived dative suffixes. These suffixes are -*ant^{h}i* 'to' < MK **an-t^{h}oi* 'in-place' and -*ap^{h}i* 'to' < Jejueo *ap^{h}-i* in.front-LOC 'in front of'. Because the dative suffixes -*ant^{h}i* 'to' and -*ap^{h}i* 'to' are semi-frozen and maintain morpheme boundaries, a morpheme can be replaced with a borrowed MSK morpheme. It is not well known that the Jejueo dative markers -*ap^{h}i* 'to' and -*ant^{h}i* 'to' underwent grammaticalization from postpositional forms. Middle Korean did not feature a set of dative case suffixes.

Though the borrowing patterns for Jejueo dative marker -*ap^{h}i* 'to' mirror those of -*ant^{h}i* 'to', the postposition from which -*ap^{h}i* grammaticalized did not undergo semantic bleaching. The postposition *ap^{h}-i* continues to be produced in complementary distribution with the dative case marker -*ap^{h}i*, with -*ap^{h}i* 'in front of' suffixing to inanimate NPs and -*ap^{h}i* 'to' suffixing to animate NPs. The two postpositional forms **hʌn-t^{h}oi* 'one-place' and *ap^{h}-i* 'in front of' share a similar morphological structure, however, in that both feature a place adverbial head followed by the suffixal locative morpheme **t^{h}oi/(t)i* 'to, at'.

In both the Osaka and Jeju communities the MSK-Jejueo blended dative suffix -*hant^{h}i* 'to' is produced more frequently than the native Jejueo dative marker -*ant^{h}i* 'to', suggesting phonological leveling with the MSK form. The data collected here suggests a borrowing pattern where forms in Jejueo that are etymologically related to forms in Korean show more rapid shift to the dominant language's cognate form. In this case speakers may be more likely to access the /h/ phoneme shared by the MSK cognate -*hant^{h}e* 'to' under contact pressure from the dominant language.

For both -*ant^{h}i* and -*ap^{h}i,* borrowing from MSK manifests in a repertoire of dative markers containing elements from both MSK and Jejueo, often with individual speakers producing more than one variant. Speakers in both Osaka and Jeju produced Jejueo -*ant^{h}i* 'to' as -*hant^{h}i,* and in Osaka, also as -*ant^{h}e*, borrowing the second syllable of MSK -*hant^{h}e* 'to'. Although the Jejueo dative suffix -*ap^{h}i* 'to' was produced only by the Osaka community, it was produced as the blended form -*ap^{h}e* 'to' more often than as the native Jejueo suffix. Jejueo speakers in Osaka produced -*ap^{h}i* as blended suffixes *hap^{h}i* and -*ap^{h}e,* showing borrowing from the MSK dative suffix -*hant^{h}e*. In the case of the blended form -*ap^{h}e,* speakers possibly borrowed the MSK locative marker -*e,* or borrowed the full MSK locative postposition -*ap^{h}e* 'in front of' to be used here as a dative marker. Unlike in Jejueo, the MSK postposition -*ap^{h}e* cannot suffix to animate NPs as a dative marker. This form has not undergone grammaticalization in the dominant language, although it has in Jejueo. The semantic asymmetry between the Jejueo dative-locative postposition -*ap^{h}i* 'to/ in front of' and the MSK locative postposition -*ap^{h}e* is likely the reason no speakers produced -*ap^{h}i* or its blended dative forms in Jeju, where most speakers are dominant in MSK. The locative suffix -*ap^{h}e* cannot evince a dative meaning or suffix to an animate NP in MSK. For this reason, the 'borrowability' of elements of MSK

postpositional and dative suffixes into Jejueo dative suffixes is interesting. When speakers borrow into the Jejueo dative marker *-ap^{h}i* 'to' the MSK locative morpheme *-e*, or the postposition *-ap^{h}e* depending on how the borrowing is analyzed, speakers are analyzing locative morphemes from the dominant language as dative. In this way, speakers enable the MSK morphemes to jump the semantic boundary into a dative suffix. In Osaka 56% of speakers borrowed the full MSK postposition *-ap^{h}e* 'in front of' (*-ap^{h}e* in MSK) and attached it to animate NPs, reanalyzing the MSK postposition as a dative. Individual speakers alter their production of *-ant^{h}i* and *-ap^{h}i,* borrowing different elements from MSK, or fewer elements in one utterance, and more elements in the next. By contrast, the Jejueo dative marker *-sin(t)i* 'to', which did not undergo grammaticalization is comparatively quite stable in both communities and invulnerable to borrowing from MSK. Furthermore, the fact that *-ant^{h}i* and *-ap^{h}i* (if available in the repertoire) are more likely to be produced as blended forms featuring MSK segments than as Jejueo shows that the Jejueo forms are being replaced by MSK. As the MSK and Jejueo cognates *-hant^{h}e* and *-ant^{h}i* are both available, speakers produce the MSK form more frequently. In situations of language contact, when substrate and superstate forms etymologically derive from the same form, the substrate variants may have a propensity to shift to the dominant language's variant, as if there is a trajectory to return to one form. Unlike *-ant^{h}i* 'to' and *-ap^{h}i* 'to', *-sin(t)i* 'to' is not etymologically related to an MSK form. No speakers produced a variant of *-sinti* which features elements from both languages, and *-sinti* is the Jejueo dative marker used most frequently by both Jejueo-speaking communities.

In the examples below, 109 shows borrowing of the first syllable of the MSK dative marker *-hant^{h}e* into the Jejueo dative marker *-ant^{h}i,* creating the blended dative suffix *-hant^{h}i* 'to'. Example 110 shows borrowing of the second syllable of *-hant^{h}e* into *-ant^{h}i* to form *-ant^{h}e.*

*MSK forms in bold

(109) ***sʌnsɛŋ -i tɕʰɛk-ɯl*** *hɔksɛŋ* ***-hantʰi tɕu -ko iʂ̠ -ta***
teacher-NOM book -ACC student-**DAT give-PROG EXIST.PLN[PRS]-DECL**
'The teacher is giving the student a book.'

(110) ***haksɛŋ-i sʌnsɛŋ-nim*** *-antʰe* ***tɕʰɛk-il tɕuʌ***-*m -su -koa*
student-NOM teacher-HON-DAT **book-ACC give**-IND-FO[PRS]-Q
'Is the student giving the teacher a book?'

Figures 19 and 20 below demonstrate speakers' production of the Jejueo dative suffix -*antʰi* 'to' in Jeju and Osaka, respectively. Both 19 and 20 show that speakers produce the native Jejueo suffix -*antʰi* with less frequency than either the MSK cognate dative suffix -*hantʰe* or the dative suffixes containing elements from both Jejueo and MSK, -*hantʰi* and -*antʰe.* While less fluent Jejueo speakers in Jeju produce the MSK form and blended form with almost equal frequency, a shift to the MSK form is taking place and is replacing the native Jejueo form. In Osaka, as in Jeju, about half of speakers produce the MSK form -*hantʰe*. However, in this community, where speakers have less contact with Korean, the Jejueo variant is slightly better preserved, with 17% of speakers producing the Jejueo suffix -*antʰi.*

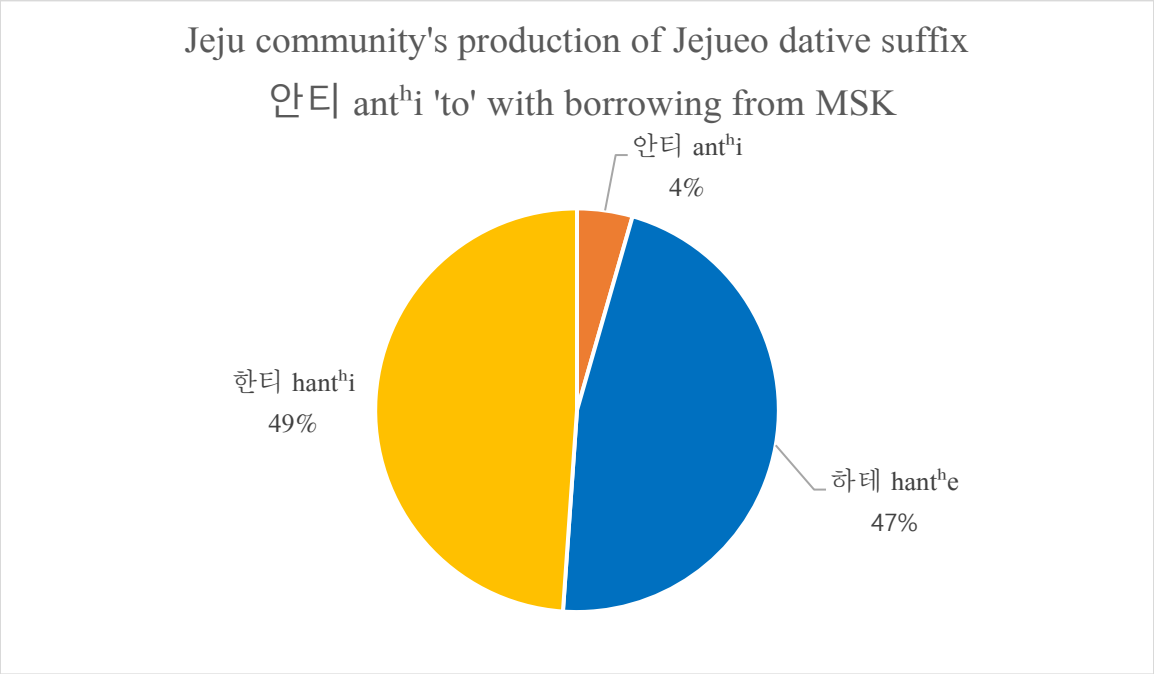


Figure 19. Production of the Jejueo dative suffix -*ant^{h}i* with evidence of phonetic transfer from the MSK dative suffix -*hant^{h}e* and complete shift to -*hant^{h}e*.

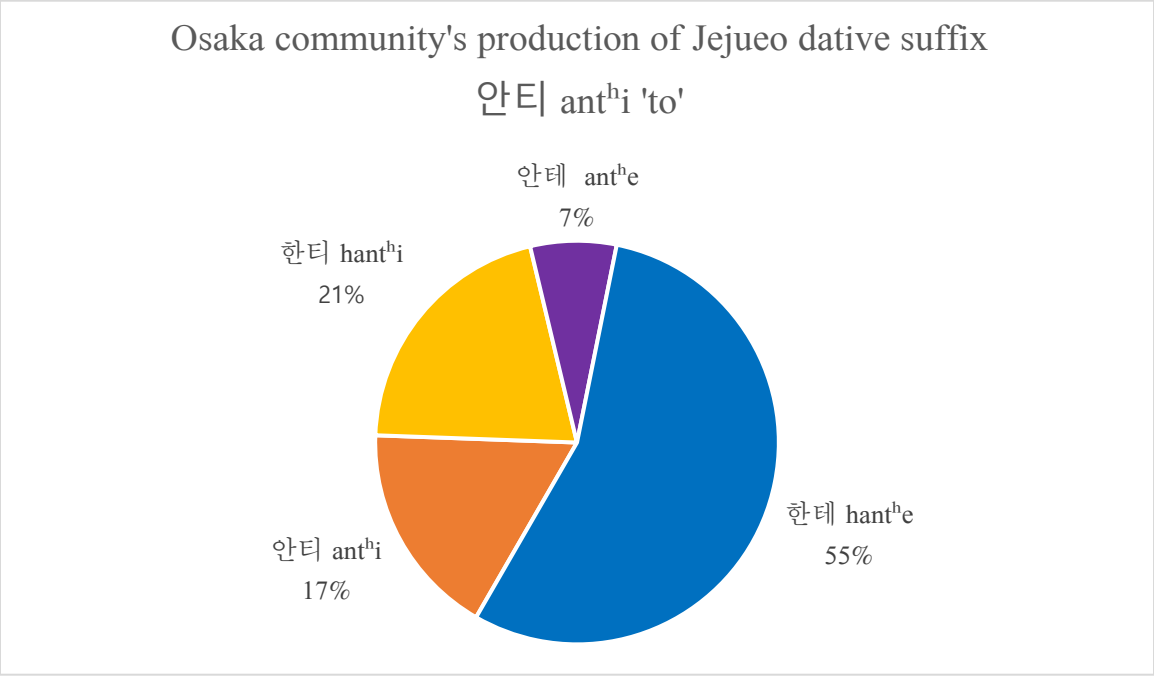


Figure 20. Production of Jejueo dative suffix -*ant^{h}i* with evidence of phonetic transfer from MSK dative suffix -*hant^{h}e* and complete shift to -*hant^{h}e*.

The blended dative suffixes based on *-apʰi* ‘to’, which contain elements from both MSK and Jejueo, are featured in examples 111 and 112. These productions of *-apʰe* ‘to’ and *-hapʰi* ‘to’ demonstrate the link between the borrowing patterns of the two grammaticalized Jejueo dative markers, *-antʰi* and *-apʰi*. The speaker in 111 borrowed the MSK locative marker *-e* ‘to, at’, replacing the Jejueo variant of this form *-i* ‘to, at’. Yet *-apʰi* is a frozen dative case marker, which contains no morpheme boundaries. In the blended dative suffix *-apʰe*, the MSK locative morpheme *e* is reanalyzed as dative, which is not its function in MSK. However, the pair of MSK postpositional and dative forms *-an-e* in-LOC ‘inside’ and *-hantʰe* ‘to’, mirrors Jejueo postpositional and dative forms *an-tʰi* in-LOC ‘inside’ and *-antʰi* ‘to’ as well as *apʰ-i* front-LOC ‘in front of’ and *-apʰi* ‘to’. Therefore, although the dative marker *-apʰi* is frozen, in the competence of Jejueo speakers it contains two morphemes and is analogous to the MSK dative marker *-hantʰe*, motivating borrowing of the MSK locative suffix. In 112 the speaker borrows the first syllable from *-hantʰe* into *-apʰi* to form the blended suffix *hapʰi*, showing the same reappearance of morpheme boundaries and analogy to MSK dative suffix *-hantʰe.*

*MSK forms in bold

(111) *minho-ja* ***sʌnsɛŋ-apʰe*** ***tɕu*** *-mɨn* *ʌt̪ʌŋ-ha* *-na*
Minho-VOC **teacher-DAT give**-COND how-do[PRS]-PLN.Q
‘Hey Minho, how about giving the teacher a book?’

(112) *tɕʌ* *hɔksɛŋ-i* ***sʌnsɛŋ-h-apʰi*** *tɕʰɛk-ɯl* *annɛʌ-m* *-k̪unai*
DIST.DEM student-NOM **teacher-DAT** book-ACC give -IND-PLN[PRS]TAGQ
‘That student is giving the teacher a book, isn’t he?’

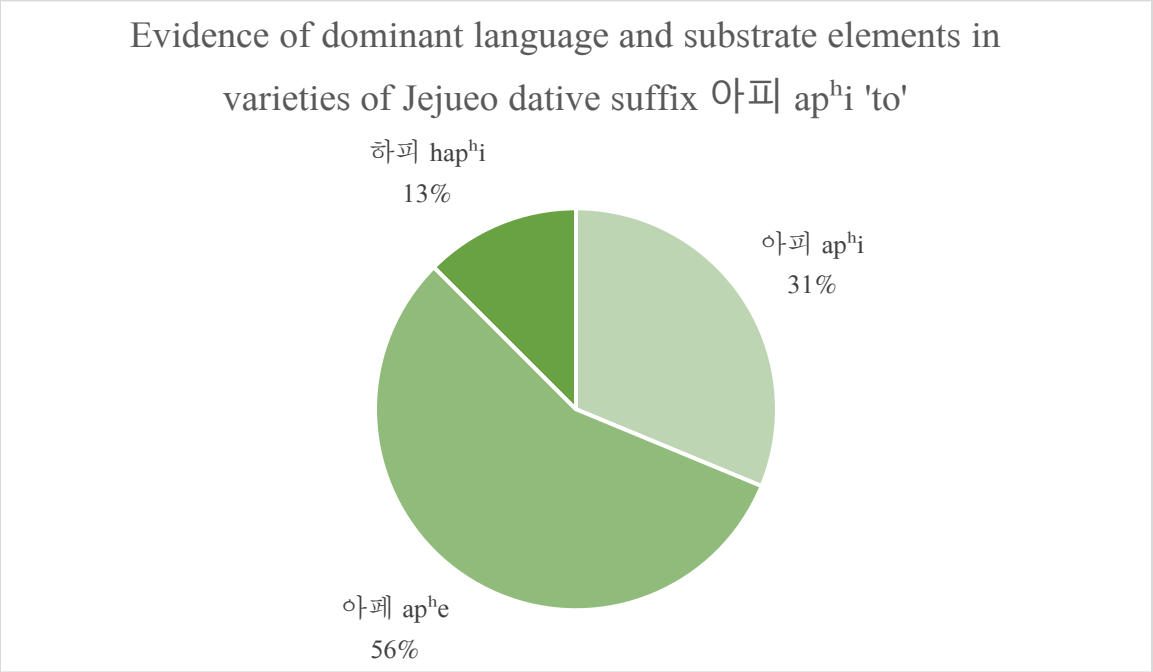


Figure 21. Production of Jejueo dative suffix with evidence of phonetic borrowing from MSK dative suffix.

Figure 22 shows the repertoire of dative suffixes collected from Jejueo speakers in Osaka, including native Jejueo dative suffixes, borrowed MSK dative suffixes, and blended dative suffixes featuring elements from both Jejueo and MSK. Figure 23 shows the same information for the community of Jejueo speakers in Jeju. The two communities stand in sharp contrast to one another in that the less-fluent Jeju community shows a high level of shift to the most common dominant language dative suffix, -*eke*, which is unrelated to any Jejueo form. In Jeju speakers produce -*eke* about four times more often than any Jejueo or blended dative suffix. The Osaka community shows a preference for *hant*^{h}*e,* the MSK variant of the Jejueo dative suffix -*ant*^{h}*i*, which, as discussed previously, is a language shift that may be predicted when two varieties of a related form come into contact through a dominant language-substrate contact situation. It is also apparent in figures 22 and 23 that Jejueo dative suffix -*sinti* 'to' is relatively productive in both communities, and is less vulnerable to internal shift due to its lack of

etymological relationship with an MSK form. Figure 23 suggests that Jejueo in Jeju is undergoing a radical shift to MSK, with several Jejueo dative suffixes preserved by speakers over age 70. Figure 22 also suggests that Jejueo in Osaka is undergoing shift to MSK, but speakers are actively using Jejueo in a situation of language contact: Jejueo forms are more likely to be blended with MSK forms and perhaps broken down and reanalyzed but have not been replaced entirely by MSK forms.

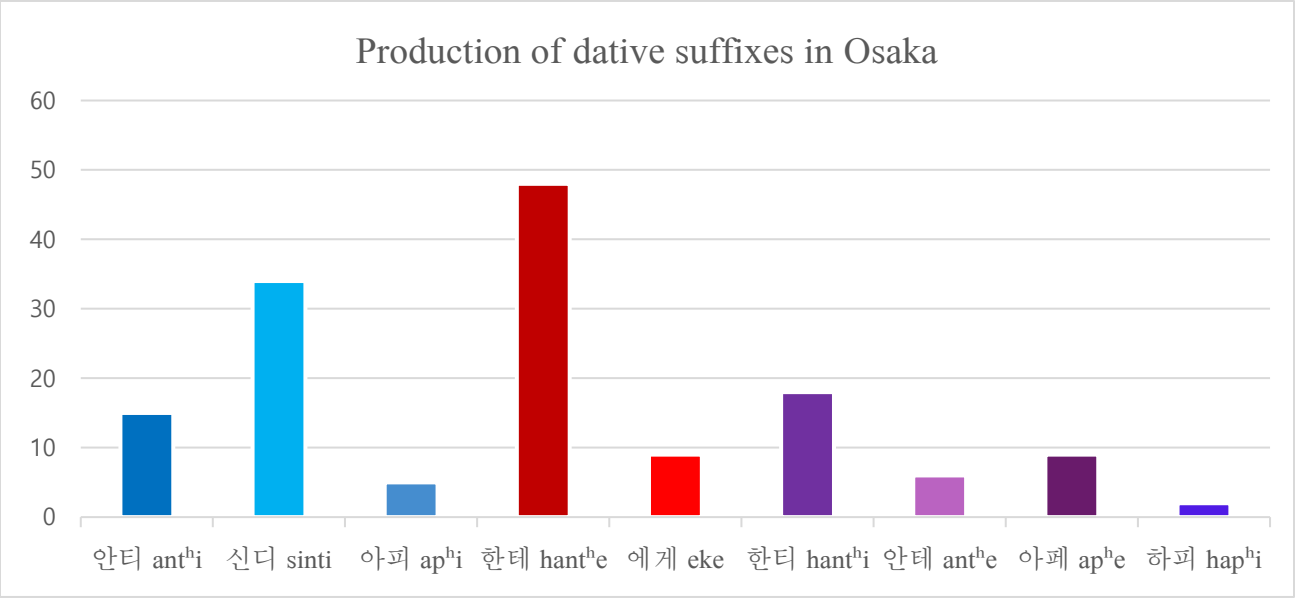


Figure 22. Production of Jejueo dative suffixes with 6 forms demonstrating full or partial borrowing from MSK. Blue: Jejueo items, red: MSK items, purple: items taking elements from Jejueo and MSK.

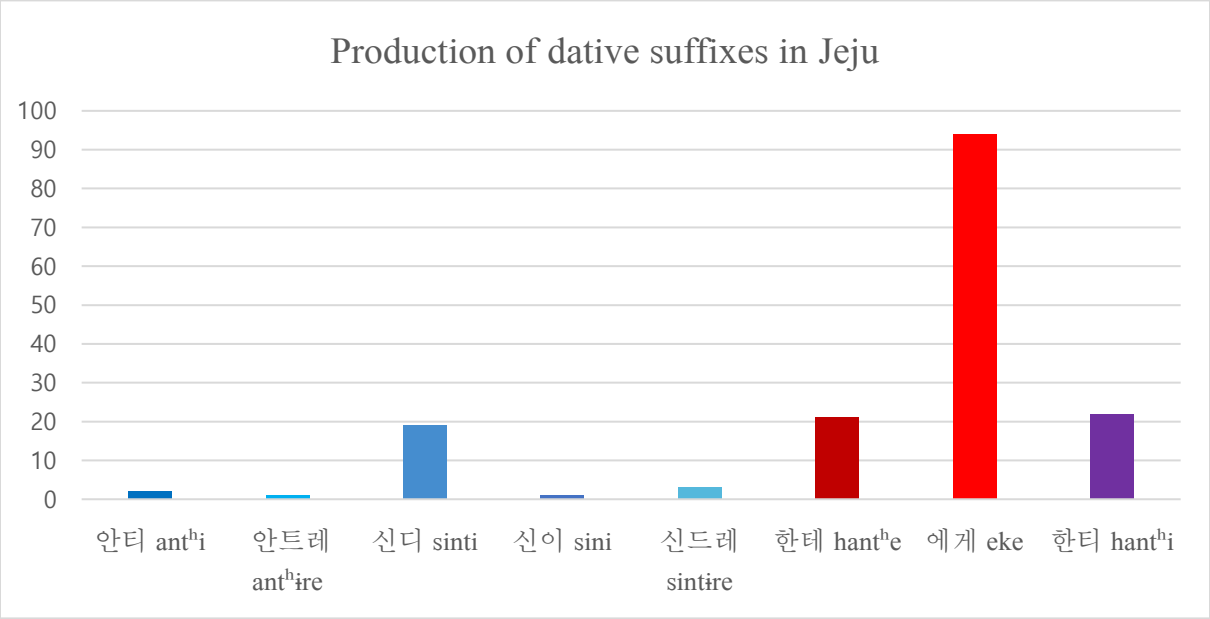


Figure 23. Production of Jejueo dative suffixes with 4 forms demonstrating full or partial borrowing from MSK. Blue: native Jejueo forms, red: MSK forms, purple: forms taking elements from Jejueo and MSK.

6.5 Discussion

In the Jeju speech community age and fluency in Jejueo are linked. Generally, speakers over 70 years old are Jejueo L1 speakers, those under 60 are Jejueo L1 but MSK dominant speakers. Speakers of 60-70 years show varied levels of fluency in Jejueo. In Osaka age is not a predictor of fluency. Jejueo speakers left Jeju for Osaka anywhere between 1950 and 2000, a period which saw drastic language shift from Jejueo to MSK in Jeju. Furthermore, speakers in Osaka belong to a wider variety of speech communities than speakers in Jeju. Many speakers in their 70s and 80s belong to speech communities where Japanese is preferred for most communication. For speakers in assisted living situations in Osaka, most communication takes place with Japanese caregivers. Many of the younger speakers in Osaka work in the Korean marketplace in Tsuruhashi, which boasts a Jejueo-speaking majority and a dense, multiplex social network, meaning that speakers communicate with their own small community in a variety

of functions. Many families who work in the marketplace also care for their elderly relatives in the home, where Jejueo is the preferred language.

Taken together, the three case studies presented in this chapter paint a picture of contact-induced change happening at all levels of the language in both Jejuan and Osakan varieties of Jejueo. In Jeju, the pattern of language shift to MSK is clear, and the generations of Jejueo speakers are diverging to a greater and greater extent due to contact pressure from MSK and language ideologies that favor the prestige language. In Osaka the picture is complicated in part by the diversity of languages in the linguistic marketplace of Tsuruhashi. Here, Jejueo speakers are trilingual, and often know multiple varieties of Korean. The Jejueo spoken by Jeju immigrants in Osaka conserves forms that have been lost on Jeju Island in the last decades, but these diverse lexemes and grammatical morphemes are also continuously evolving under contact with Korean, as in the case of the mixed dative suffixes. In the next chapter I will discuss the theoretical implications of my findings in this dissertation project and present ideas for future research.

Chapter 7

General Discussion and Conclusions

The present chapter provides a summary of the dissertation and a general discussion of my findings from chapters 2-6. I will relate the two halves of this research project, for which language contact is the common theme: Jejueo as it developed historically, and Jejueo as it continues to develop today in two varieties. In section 7.2, I will discuss the implications of this research, and in 7.3, I conclude the chapter with a layout of topics for future research.

7.1 Summary of the dissertation

Chapter 2 of this dissertation provided an overview of the research done on Korean historical linguistics and the historical movements of populations of speakers of different languages into Jeju Island in the late Goryeo and early Joseon eras. I follow the history of Jeju citizens into the Japanese occupation of Korea in 1910, the massacre of Jeju citizens in 1948, waves of Jejueo speakers' migration to Osaka throughout the 20th century, and the current period of hyper-tourism on Jeju Island that began in the late 1960s. Owing to all of these historical factors, Jejueo developed in significant language contact in the Middle Korean period, and is now in the final stages of a generational shift to Korean. In Chapter 3, I discuss the relevant features of Middle Korean structural systems, particularly phonology and morphology, that have diversified the modern dialects of Korean and Jejueo. Chapter 4 provides an overview of the five modern dialectal regions of Korea and demonstrates how Korean developed areal features belonging to particular dialects, or whole regions of the country. Attention was paid to those features which tie Jejueo to historical changes in Korean phonology and morphology, such as the

northward movement of palatalization in the late MK period and the clines of grammaticalization that Korean locative and dative suffixes emerged from in the modern era. In Chapter 5, I present the phonological, morphological, lexical and pragmatic features of Jejueo which have been maintained from MK. Here I discuss which features are unique to Jejueo and which features are likely a result of contact with the southern dialects of Korean. In section 5.5, I argue for Jejueo's position as a sister language to Korean in the Koreanic family tree and for the historical period of approximately two centuries when most of the traceable features of Jejueo developed. Chapter 6 presents three case studies which examine the development of two varieties of Jejueo spoken on Jeju Island, Korea and Osaka, Japan. I demonstrate the effects contact with Korean and/or Japanese has had on the Jejueo variety spoken in each community and on different generations of speakers.

7.2 Implications of the research

The implications of this dissertation are threefold. First, in Chapter 5, I provide evidence for the approximate time period when Jejueo split off from Korean. The evidence I provide is based on the dating of sound changes and distinctions between Jejueo's phonological system and those of the southern Korean dialects. I also provide evidence from the timing of stages of the grammaticalization of dative markers in MK and early Modern Korean. I argue that Jejueo's dative suffixes are different from those in the Korean dialects because they developed separately from different source material within MK. In her research on Jejueo, Kang (2005) proposes a diachronic account of Jejueo locative case morphemes, analyzing the process by which locative-dative morphemes were borrowed from Manchu into the Jejueo morphological system during the early Joseon period (1392-1897). To this research, I add an analysis of another dative marker, *-anti* 'to' and its separate development from the similar Korean form, *-hante* 'to'.

Second, in case study 3, I examine the current clines of morphological change for Jejueo locative-dative case morphemes, postpositions, and comitative case morphemes. Owing to a complex network of internal linguistic and extralinguistic factors in both communities, several patterns of borrowing demonstrated by Jejueo speakers defy theoretical expectations for 'top-down' borrowing hierarchies (Weinreich 1953, Moravcsik 1978, Curnow 2006, Haig 2006): namely, on Jeju younger speakers have shifted to Korean but borrow sentence-final grammatical suffixes from Jejueo. This is not so unusual, though, given that Korean and Jejueo are historically related and typologically similar. In Jejueo, the verb-final suffixes are unique from Korean, and occur at phrasal boundaries. This may boost their likelihood to be salient to Jeju-Korean speakers. Anecdotal evidence suggests that these verb-final suffixes have also become a positive marker of Jeju Island identity, but more research on this topic is needed.

Third, in case study 2 in Chapter 6 I discuss the state of the tonal change which moved outward from the Central dialectal region in the 1970s and has now entered Jejueo's phonological system as a result of influence from MSK. The shift in cue weighting for lenis and aspirated stops is sensitive to age, education and linguistic ideologies concerning the value of Jejueo.

7.3 Future research

Beginning with the philological discussions in the early chapters of this dissertation, it seems valuable to take a second look at words of no known origin in Jeju and look for corresponding morphemes in the southern dialects of Korean. If correspondences emerge in data from the Jeolla province, this could potentially lead to discoveries in the Baekje language, spoken during the Three Kingdoms period (57 BCE to 668 CE) in present day Jeolla province and in Jeju, at least after Tamna was absorbed into the Baekje kingdom in 476

CE. To add, a comprehensive study of Jejueo ideophones could shed light on forms in Jejueo that show no known correspondence in Korean. Are these forms comparable with Japanese ideophones? There is semantically marked vowel harmony in Koreanic ideophones, where a change from a front to back vowel changes the value of the word from positive to negative, but not the meaning. When compared with ideophones in neighboring languages like Japanese, what, if anything, can they tell us about historical areal contact?

Moving on to the sociophonetic case study in 6.3, it would be interesting to conduct the study in the Osakan Jejueo-speaking community. No research has been conducted on tonal change in Osakan Jejueo, and a longitudinal sociophonetic study could help shed light on the role demographic and psychological factors play across generations in Osakan Jejueo production. Moreover, no studies have been undertaken on Koreanic tones in contact with Japanese pitch accent. While Jejueo was in contact with Japanese throughout the first half of the 20th century in both Jeju and Osaka, a focused study on Osakan Jejueo supersegmental phonology might be able to tell us something about the Jejueo tonal and prosodic systems in Jeju that remain mysterious.

Finally, while the word-final velar nasal in Jejueo is quite well-known, to date, no historical linguistic studies on how the velar nasal developed have been undertaken. How far back into Jejueo's development can we find evidence of the word-final velar nasal? Could it give a glimpse of Jejueo's earlier phonology or is it a shallower change based on contact with another language?

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