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Abbreviations

LHC	Later Han Chinese
LMJ	Late Middle Japanese
MC	Middle Chinese
MdJ/NJ	Modern Japanese
MJ	Middle Japanese
OJ	Old Japanese
OKog	Old Koguryō
PJ	Proto-Japanese
POJ	Pre-Old Japanese
PR	Proto-Ryūkyūan

Part 1: Introduction

In the introduction chapter of this thesis, I would like to provide a brief description of the cultural and historical contexts that shaped the Japanese language. The question of the origin of the Japanese language has engaged scholars for decades, but because of the limited available data, it does not appear as though an answer to this question is attainable soon. Particularly because of the scarcity of data, a thorough understanding of the prehistory of the Japanese people and their language is necessary, which can be achieved by embedding the little data available to scholars into a wider research context.

The arrival of the Japonic language family in the Japanese archipelago likely coincides with the arrival of wet-rice agriculture from the Korean peninsula. This has historically been dated to around the beginning of the Yayoi period in 300 BCE, but recent archaeological discoveries indicate that rice cultivation could have been introduced to the Japanese islands more than 500 years earlier (Shōda 2007). It should be noted though that the earlier date is still hotly debated, and no consensus opinion has been reached yet¹. According to AMS dating from archaeological excavations, the introduction of wet-rice agriculture in Japan should be dated to around 3000 years ago (Takahashi 2009:71). First signs of paddy rice cultivation were dated to around 400–500 BCE (Rhee *et al.* 2007:415–416).

The connection of wet-rice and the spread of Japonic into the Japanese archipelago is based on the ‘farming/language dispersal hypothesis’ (Bellwood and Renfrew 2002, Bellwood 2005). This hypothesis postulates that advanced farming technologies will facilitate population growth, which in turn causes rising population densities. Subsequently, early farming societies expand their territory by populating new regions and spreading their languages along with their agricultural technology in the process (Stevens and Fuller 2017:154). However, the ‘farming/language dispersal hypothesis’ in combination with archaeological data yields only a tentative date for the introduction of Japonic and is not able to provide any further detail as to its development from

¹ A recent publication comments on the dating the beginning of the Yayoi period that “scholarly debate rages!” (Goodwin and Piggott 2018:xix).

this date. Therefore, more detailed research on the earliest available linguistic sources for the Japonic language family needs to be carried out.

1.1 The Japonic language family

The genetic affiliation of Japanese is still a very contentious topic. In the last decades the classification of Japanese into the Japonic language family² has gained wide acceptance among scholars. This term was coined by Leon Serafim in the early 1990s (Vovin 2017). It consists of the modern Japanese dialects, the Ryūkyūan languages and Hachijō (spoken on a few islands south of Tokyo). According to Heinrich and Ishihara, the Ryūkyūan languages consist of six languages: Okinawan (Kunigami and Uchinaaguchi), Miyakoan, Yaeyaman, Dunan (Yonaguni), and Amamian (Heinrich and Ishihara 2017:165). The location of the languages on the Ryūkyūan islands is shown in Figure 1. It should also be pointed out that the Ainu language that is found in the north of Japan, mainly on the island of Hokkaidō, likely constitutes a language unrelated to the Japonic language family that may have already been present before the introduction of rice agriculture into Japan. I will therefore not consider the Ainu language in this thesis.

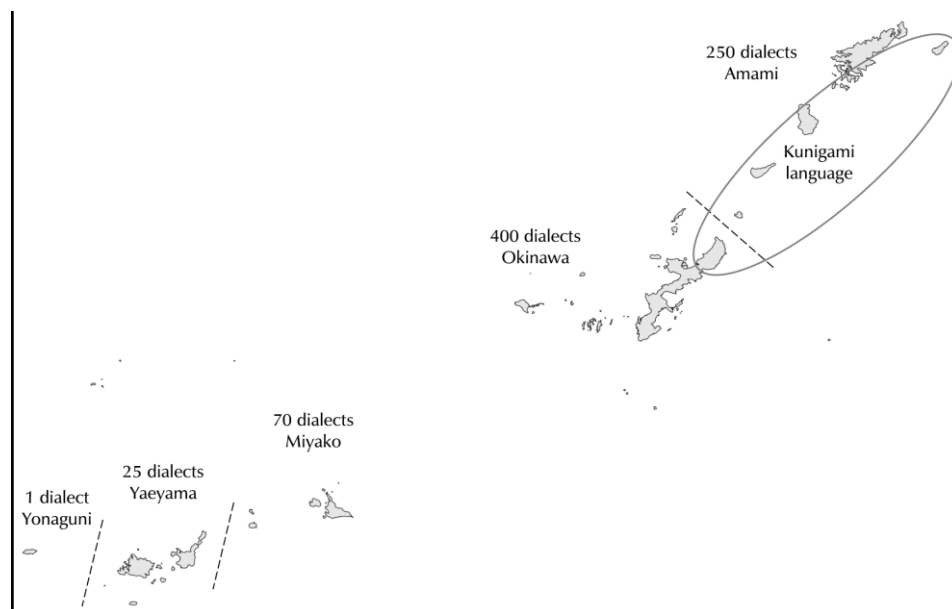


Figure 1: Geographic distribution of the Ryūkyūan languages (adapted from Heinrich and Ishihara 2017:166)

² In Japanese the term *Nichiryū sogo* 日琉祖語 seems to be most commonly used (Vovin 2017).

The Hachijō language that is sometimes proposed as a third branch in the Japonic language family has not been researched well enough to make any definite judgement and thus needs to be researched further. Pellard points out that “no evidence is found to support Hattori’s (1976) idea that Hachijō might have been the first variety to branch off Proto-Japonic, and that Japanese and Ryukyuan thus might form a subgroup” (Pellard 2015:16). Additionally, he points out that “the hypothesis by Thorpe (1983: 236–238) that Ryukyuan is most closely related to Eastern Old Japanese (the probable ancestor of Hachijō) is not supported linguistically, and his idea Eastern Japan was settled from Kyushu by leapfrogging over Central Japan is not backed up by any evidence” (Pellard 2015:16). Pellard’s proposed language tree for Japonic is shown in Figure 2.

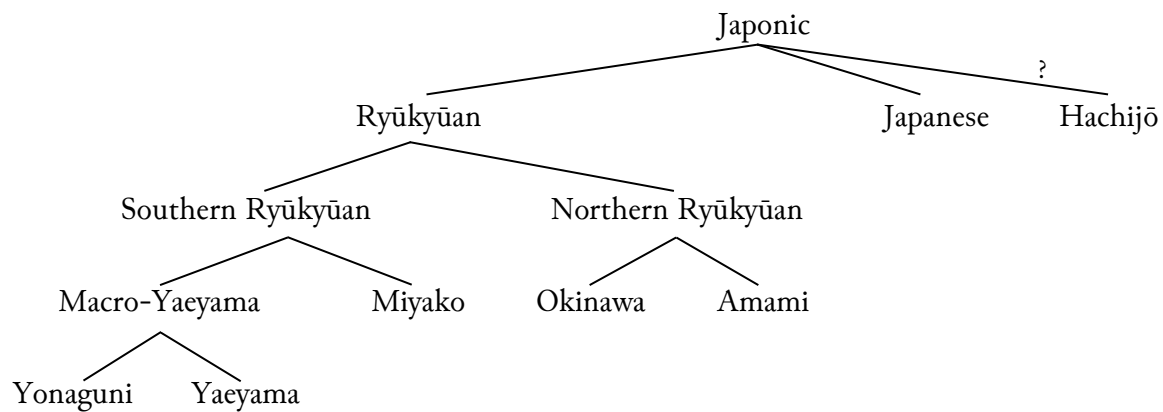


Figure 2: Language tree of the Japonic language family (Pellard 2011:58)

For research on Proto-Japonic, the most important sources are the Old Japanese corpus available through Old Japanese sources and data from the Ryūkyūan languages. Pellard sums up the importance of Ryūkyūan language data as follows:

Since Ryukyuan is a sister and not a daughter language of Japanese, it follows that the Ryukyuan data is at least as important as the Old Japanese texts, and that any feature reconstructible at the Proto-Ryukyuan level potentially goes back to Proto-Japonic, even if there is no trace whatsoever of it in Japanese. (Pellard 2015:16)

Other related Japonic languages have possibly existed on the Korean peninsula until the 9th century CE but have since died out (Vovin 2017). Despite extensive research, affiliations with other major language families such as Altaic could not be proven until today. Probably the most dis-

cussed is whether the relationship between Japanese and Korean is genetic or typological. Including Japonic in the Altaic language family along with Koreanic, Mongolic, Turkic and Tungusic has been very common for decades of research, but despite great scholarly efforts, it could never be proven. For that reason, the Altaic hypothesis in connection with Japonic has lost traction over the last years. Another important theory is that of a relationship between Japonic and the Austronesian languages that are thought to have spread from the island of Taiwan over a vast area in the Pacific Ocean. Nowadays, most scholars agree that Japonic has Altaic and Austronesian elements, but there is no agreement on how exactly historical developments led to the emergence of Japonic. A very widespread theory in Japan is the mixed language theory, which assumes that modern Japanese consists of a superstratum and a substratum of different language families of Altaic and Austronesian origin.

1.2 Previous research: When did Japonic split into Japanese and Ryūkyūan

In the following, I will give a brief overview of attempts to answering the question of the separation of the Japonic language family into the Japanese and Ryūkyūan branches. Due to a lack of available Japanese literature, this section mainly relies on western scholars and their opinion on the theories by Japanese scholars. I hope that I will be able to also do justice to the opinions of Japanese scholars in this way, although not all opinions of Japanese scholars can be considered first-hand.

The difficulty in dealing with this question is the scarcity of historic language data of the Japonic language family, as I will show in more detail in the following chapters. Because of this, several different methodological approaches have been applied in research over the years. I will review some of the most prominent theories that have emerged in the last centuries and provide a brief assessment of them.

Based on glottochronology, Japanese linguist Hattori Shirō (1959:82–83) dated the split of the Kyōto dialect and the Shuri dialect of the Ryūkyūan languages to around 500 CE (1453 years

ago). Ōshiro Ken also applied “glottochronology to 200-item word lists from Tōkyō and ten representative Ryukyu dialects” (Ōshiro 1972; cited in Unger 2009:99). The result of his research was a split of the two language branches around 1385 BP, and thus in the latter half of the sixth century CE. Despite the general criticism of the method of glottochronology, Marc Miyake for example disregards any attempt of dating the split via glottochronology (Miyake 2003:103), J. Marshall Unger evaluates the basic vocabulary lists used by Ōshiro as very good, stating that the language data was recently collected by linguists and the possibility for error is little, given the short time depth of less than 2000 years. However, Unger notes one major problem in the application of the mathematical model. After correcting the faulty equation, Unger recalculates the values for Ōshiro’s study. The new date for the split of the Japonic language family would thus be before 996 CE (based on data from Tōkyō and the Ryūkyū dialect of Kurima) and therefore ca. four centuries later (Unger 2009:100).

A split during the 10th century CE would also be in line with archaeological data, as has been pointed out by Leon Serafim (Unger 2009:100). Recently, archaeologist Richard Pearson has provided new information on the settlement of the Ryūkyū islands and its implications for the split of the Japonic language family. Speakers of Japonic are connected with the spread of wet-rice agriculture, which occurred around 800 CE (Pearson 2013:284–285). The Sakishima islands in the south of the Ryūkyū islands “were probably colonized twice in prehistory and became linked to the entire Ryukyu Archipelago through trade and further colonization in the eleventh century AD.” (Pearson 2013:71). Archaeologist Mark J. Hudson considers that the Ryūkyūan languages and new cultural items spread to the Ryūkyū islands with the Gusuku culture in the 11th to 12th centuries CE from Japan (Hudson 2017:191).

Based on research by Uemura Yukio (1977, cited in Serafim 1994), Serafim suggested that the original speakers of the Ryūkyū language family are descendants of the Hayato people from the southern part of Kyūshū. This may be connected to a “population shift of major proportions” around the year 200 CE, through which Japonic entered the Ryūkyū islands (Serafim 1994:6). Serafim later changed his opinion, stating that the “hypothesis of Hayato moving south or having

their dialect group split apart by political forces appears to be untenable.” This is because he believes the spread to the Ryūkyū languages must have happened later than initially thought and therefore cannot be related to the language of the Hayato people (Serafim 2003:474)³.

In recent years, the method of Bayesian phylogenetic analysis has been applied for many language families. Sean Lee and Hasegawa Toshikazu published one important study for the Japonic language family in 2011. Their research used 59 lists of 210 basic vocabulary and found that the split of the Japonic language family happened around the 2nd century BC (Lee and Hasegawa 2011). It should be noted that there is some data missing in their research, most notably the Amami languages of northern Ryūkyū. Additionally, Pearson points out that this timing of the split of the Japonic language family “does not correlate with the archaeological evidence of a population input” (Pearson 2013:285).

This view of the split of the Japonic language family opposes the conventional view of linguists. Thomas Pellard, a specialist of the Ryūkyūan languages, points out that “this novel methodology is still subject to debate, and in this case, there are problems with both the data and the application of the method (cognacy assessment, chronological calibration, etc.).” The result by Lee and Hasegawa would also have far-reaching implications for the study of Japonic, as a correlation of linguistic and archaeological data would no longer be tenable (Pellard 2015:20–21).

As this methodology is still subject to debate, Pellard suggests more conventional ways for dating the split of the Japonic language. He examines the Old Japanese corpus (7th/8th century CE) under the aspect that “if we can show that some changes attested in the Japanese written records of a certain period have not affected Ryukyuan, then Ryukyuan and Japanese must have split before that time” (Pellard 2015:21). He shows that several vowel mergers that are present in Old Japanese did not yet occur in Ryūkyūan and thus concludes that Ryūkyūan cannot be a

³ Recently, it has been found that skeletons associated with the Hayato people are genetically closest related to the immigrant population that brought rice agriculture and Japonic to the Japanese archipelago (Saiki and Wakebe 2012:122–123). This would make a possible relation between the Hayato language and Ryūkyūan more likely. However, data on the Hayato language is scarce and only two words are documented in the *Ōsumi Fudoki* (romanization based on Japanese glosses in the original, but the exact pronunciation is unknown): *hi-si* 必志 ‘sand in the ocean’ and *ku-si-ra* 髮梳 ‘hair comb’ (Akimoto 1971:526).

daughter language of Old Japan, but has to have split off from a common ancestor before the Old Japanese language was recorded in the 7th century CE (Pellard 2015:22).

Importantly, Ryūkyūan still preserves phonological distinctions such as Proto-Japonic *ui and *ɰi. In Old Japanese this had already merged into i_2 and a split must therefore have occurred before the 7th century. Pellard argues that this distinction is Proto-Japonic, because “these diphthongs follow different alternation patterns in the morphophonology: $i_2 < *ui$ alternates with u, and $i_2 < *ɰi$ with $o_{(2)}$ in Old Japanese” (Pellard 2015:21). As examples he provides *tuki*₂ ‘moon,’ which “has an alternate stem *tuku-* (*tuku-yo*₁ ‘moon night’), while *ki*₂ ‘tree’ has a variant stem *ko*₂- (*ko*₂-*no*₂-*pa* ‘tree leaf’) in Old Japanese, and these two *ki*₂ have distinct reflexes in Ryūkyūan” (Pellard 2015:21).

PJ	OJ	Amami	Okinawa	Miyako	Yaeyama	Yonaguni
*ui	i_2 (-u)	$ʔ_i$	j _i	ɿ	ɿ	i, Ø
*ɰi	i_2 (-o ₂)	h_i	i	i	i	i

Figure 3: “Pre-Old Japanese distinctions preserved in Ryūkyūan” (adapted from Pellard 2011:59)

Pellard sums up the positions taken on the separation of the Japonic language family into two main groups: before or after the Nara-period (710–794 CE). Advocates of a split before the Old Japanese sources of the Nara-period (710–794 CE) are for example Hattori 1959, Ōshiro 1972, Thorpe 1983, Nakamoto 1990, Uemura 1997, Serafim 2003, Lee and Hasegawa 2011. In favor of a split after this period are Yanagida 1993, Unger 2009, Takanashi *et al.* 2009, among others (cited in Pellard 2012:1). The view that Japonic split before the 7th century is shared by most scholars. Marc Miyake stated that the “mainstream estimate is roughly contemporary with the introduction of literacy to Japan circa 400” (Miyake 2003:103). However, the exact dating of this split is still controversial.

There are two obvious problems that hinder a more precise dating of the Japonic split: (1) there is not enough language data to successfully date the split through comparative linguistics, and (2) aligning the archaeological record with the available language data is inconclusive and can thus also not be used for an accurate dating.

1.3 Research question and scope of study

In this thesis I would like to focus on the question of the historical development of the Japonic language family. More specifically, I would like to assess whether the split of Japonic into Japanese and the Ryūkyūan languages can be dated more precisely by analyzing the Pre-Old Japanese language materials that are available from artefacts and writings prior to the 8th century CE Old Japanese corpus. As I have shown in the previous section, the most common scholarly opinions place this split slightly before the 7th century CE. There are language fragments from the Japanese language of the 3rd to 7th centuries, which to my knowledge have barely been assessed in the light of the split of the Japonic language family. Another important source of information is the reconstruction of Proto-Ryūkyūan.

Sources on the Ryūkyūan languages of southern Japan are accessible through field research that has been carried out since the post-war period. A complete reconstruction of Proto-Ryūkyūan has not been done yet and there are still several competing theories on the historical developments of the Japonic language. I will provide a more detailed discussion on Ryūkyūan language in section 2.2.

The main focus of this thesis will be on the Pre-Old Japanese language material from Chinese written sources from the 3rd century CE. Other Pre-Old Japanese language fragments will also be used. This language data will be used to evaluate data from the present Ryūkyūan languages and what information this provides for the question on whether Japonic separated before or after the Chinese text was written. Additionally, data on other Japonic languages that were spoken on the Korean peninsula will be used to further explain the developments of the Japonic language family. The aim of this study is therefore not to provide a clear dating of the split, but rather an evaluation of the Pre-Old Japanese materials and their importance for an analysis of the historic developments of the Japonic language family. The question is how the Pre-Old Japanese language data fits in the Japonic language tree. There are basically two different options that need to be considered.

Figure 4 shows how the language tree would look like if the split of the Ryūkyūan and Japanese branches happened before the recorded language data of the *Gishi-Wajinden*. If the split happened after this language data from the mid-third century CE, then the tree should look like Figure 5.

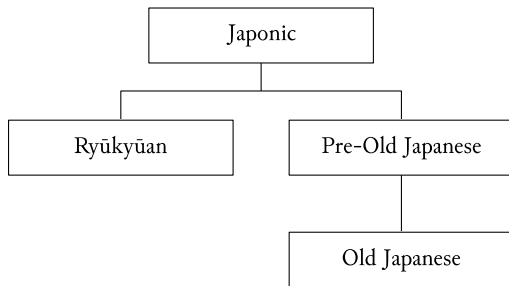


Figure 4: Japonic language tree assuming a split before the Pre-Old Japanese data

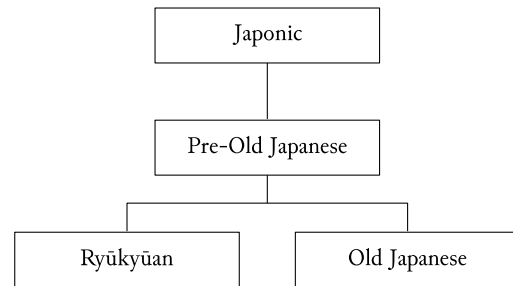


Figure 5: Japonic language tree assuming a split after the Pre-Old Japanese data

It should also be noted here, that it is not necessarily clear that Pre-Old Japanese is the direct ancestor of Old Japanese. This is because the Old Japanese corpus is from central Japan (present-day Kansai region). There is still debate on where the Pre-Old Japanese corpus should be placed, with the two major theories being northern Kyūshū (west-Japan) or the same region as the Old Japanese corpus. For the sake of simplicity, I do not deal with this question in my thesis, but further research should take the possibility into account that Pre-Old Japanese is not the direct ancestor of the (Central) Old Japanese corpus.

1.4 Methodology

I will now outline the approach that I follow in this thesis. There are various sources for language data that will be used in this thesis for analyzing the split of the Japonic language family. The oldest known stage of the Japanese language comes from the Old Japanese corpus from the eighth century CE. As for the Ryūkyūan languages, the available data is restricted to relatively recent field work from the post-war period on the languages of the islands. Reconstructions of Proto-Ryūkyūan will be used for a most historic stage of the Ryūkyūan languages, which will then be used for comparisons with Old Japanese.

As researchers generally agree that the Japanese and Ryūkyūan branches split before the Old Japanese materials were written, language data should be checked against historic language fragments that date to before this time. There are two sets of data that are of great importance. For one, there is a corpus of toponyms from the Korean peninsula that has been connected to Japonic and may shed some light on the historical development of the Japonic languages.

The most important source for analyzing the split of Japonic is a Chinese text from the third century CE. However, since the available language data is relatively scarce, its interpretation is difficult. I will reconstruct lexical items and some morphological features of this language state that will be called Pre-Old Japanese. These reconstructions and etymologies can then be compared to Old Japanese and Ryūkyūan data to assess whether it is ancestral to both Old Japanese and Ryūkyūan, or whether it should only be considered to be the ancestral language of Old Japanese.

The first step in the reconstruction process is the reconstruction of the phonological systems of the historic language stages. Since the old Chinese sources were essentially written with Chinese graphs by Chinese scribes, it needs to be understood how they transcribed Japonic language data during that time and how to recover the Japonic language underlying those transcriptions. I will reconstruct the phonology of the two varieties that are temporally closest to the Pre-Old Japanese corpus from the third century, which are from approximately the second century (Later Han Chinese) and the sixth century (Middle Chinese).

As for the Japanese branch, I will start with the most well-known language data from Old Japanese and Ryūkyūan and then proceed to Proto-Japonic. This is necessary to be able to understand how to interpret the transcriptions of the Chinese scribes during the third century. There are only certain sounds that Pre-Old Japanese may have contained, but there are also only certain sounds that the Chinese scribes could have written down. This needs to be considered when interpreting the Chinese graphs that are transcribing the Japonic language during the third century.

After the phonological systems are established, I will continue with reconstructing the Pre-Old Japanese language from the old Chinese materials. The two most important groups of language data are the recorded toponyms as well as the titles of Wa officials from the individual chiefdoms. As most recorded words fall into these two groups and they also provide the most valuable information, I will focus on interpreting toponyms and titles in this thesis.

After interpreting the Chinese graphs and reconstructing Japonic lexemes, they will be compared to Old Japanese and Ryūkyūan language data where available. This is also important for understanding etymologies of the entries and verifying their validity.

The last section will be a conclusion of the language data that was discussed throughout this thesis. Here, the initial question of when the Japonic language family split into the Japanese and Ryūkyūan branches will be addressed again and a final conclusion on the dating of the split will be given. The analysis section will provide data for answering this question – at least under the light of the scrutinized language materials.

Part 2: Language data

In this part I will describe the various sources on the Japonic language family that I will be using in this thesis. The most important known data comes from the Old Japanese corpus as well as field work on the Ryūkyū languages to the south of the Japanese island of Kyūshū. Additional data on historic stages of Japonic can be recovered from old Chinese and Korean manuscripts as well as some Japanese artifacts. All these sources are written with Chinese characters, based on which the historical pronunciation can be reconstructed.

2.1 Old Japanese

Old Japanese is a relatively large corpus for Japanese around the 8th century CE. I use the term Old Japanese in this thesis for Central Old Japanese, which makes up most of the Old Japanese corpus. This does not include language data on Eastern Old Japanese (see further below). In the two most important historical sources, the *Kojiki* 古事記 and the *Nihon shoki* 日本書紀, most of the text was written in Chinese and annotated with special characters to change the syntax so that it could also be read by Japanese scholars. Also during this time, a Japanese script called *Man'yōgana* developed from the Chinese characters and was used as a syllabary for writing down the Japanese languages. This is used for a few portions of the sources mentioned above. The much more important source written in this syllabary is the anthology of poems called *Man'yōshū* 万葉集, which will be explained in more detail below. Based on the *Man'yōshū* version of *The Oxford Corpus of Old Japanese (OCOF)*, around 60% of the more than 130,000 Chinese characters in the *Man'yōshū* were used logographically and about 40% phonographically.

2.1.1 Kojiki

The *Kojiki* 古事記 (“Records of Ancient Matters”) is Japan's oldest extant chronicle and collection of myths, legends and traditions and was compiled by Ōno Yasumaro in 711–712 CE. It consists of three volumes, the first of which depicts the mythological founding of the Japanese state. Volumes two and three follow mythological and historical emperors from the first emperor Jinmu

(trad. r. 660–585 BC) to Empress Suiko (r. 593–621). According to the *OCOJ*, it contains 112 poems written in the *Man'yōgana* script with a total of 2,527 words.

2.1.2 Nihon Shoki

The *Nihon Shoki* 日本書紀 (“Chronicles of Japan”) follows the *Kojiki* and is Japan's second oldest extant chronicle and the first of the six national histories compiled by Fujiwara no Fuhito in 720 CE. It consists of 30 volumes, the first two of which contain the mythological narratives such as the mythological founding of the Japanese state. Like the *Kojiki*, it continues with emperor Jinmu in book three and ends with empress Jitō (r. 686–697), which according to the historical text is the 41st monarch of Japan. The *OCOJ* records 133 poems in *Man'yōgana* script with 2,444 words in addition to the Chinese text of the main body.

2.1.3 Man'yōshū

The *Man'yōshū* 万葉集 (“Anthology of Myriad Leaves”) is the oldest extant collection of poetry of Japan and was written in the *Man'yōgana* script, an early form of the Japanese syllabary. Based on the dating of individual poems it was compiled in or after the year 759 CE. Some poems have been written much before that, the oldest ones possibly stem from the sixth century CE, but the majority of poems can be ascribed to the seventh and eighth centuries. It is divided into twenty volumes and according to the *OCOJ* it consists of 4,685 poems with 83,706 words in total (of which 240 poems with 3,431 words are thought of as Eastern Old Japanese). It is by far the richest source of Old Japanese material written in a Japanese script, which makes it extremely valuable for studying Old Japanese. However, even though it is written in *Man'yōgana*, many Chinese characters are still used logographically in the *Man'yōshū*.

2.1.4 Other sources of Old Japanese

The sources described above are the most important for Old Japanese. Other important sources include the *Fudoki* 風土記, local accounts of Old Japanese provinces from the eighth century. Many of the manuscripts do not survive and are therefore irretrievably lost. Others are contained

in later works in parts or as citations. The *Shoku nihongi* 続日本紀 (797 CE) that followed the *Nihon shoki* also contains materials such as the *senmyō* 宣命 (“Imperial Edicts”) and the *Engishiki* 延喜式 (927 CE) includes ritual prayer called *norito* 祝詞.

2.2 Ryūkyūan

The languages of the Ryūkyū islands south of the four main islands of Japan have long been considered dialects of Japanese, especially around the time of the second world war. In terms of linguistic research, they are widely seen as individual languages that are divided into three geographical groups. From the post-war period onwards, modern Japanese has slowly replaced the Ryūkyū languages as the primary language on the Ryūkyū islands. Today only few native speakers remain and all of them are already relatively old. This makes efforts to record their language now even more important for historical linguists. This has already led to increased field work on the islands after the second world war, with major publications on the Ryūkyū languages from the 1960s (Hirayama, Ōshima, and Nakamoto 1966; 1967). Subsequent publications include geographical information on the spread of certain forms of the words of the Ryūkyū languages (Nakamoto 1981).

Research efforts have continued and produced field notes on many more language varieties. The works from the 1960s still remain very important, because there were still a lot more and also younger native speakers available for recording the language data. This is not to say that newer research is worse, but the availability of informants constricts research to some extent. There are some problems with the older research that have been pointed out. Thomas Pellard considers the work on the southern Ryūkyū languages published in 1967 as “a rather superficial general survey of Southern Ryukyuan done in haste and full of inadequacies” (Pellard 2009:171). Data from the initial research has been enhanced and was published in Hirayama (1992–1994), which is now one of the major sources on the Ryūkyū language. However, for this thesis I will need to rely on the initial works from the 1960s, because this is the only material that is available to me. I will therefore try to be aware of possible mistakes in the material and try to use it with caution.

2.3 Japonic language fragments

In the following, I will give an overview of Japonic language data that dates from before the 8th century CE. For the most part, this stems from old Chinese historical texts that describe the Japanese islands and their inhabitants. In some cases, the language of the Japanese people was transcribed with Chinese characters, which provides a valuable source of information on how Old Japanese developed in the centuries before it was written down by the native population in Japan.

2.3.1 Pre-Old Japanese and the *Gishi-Wajinden*

While the Old Japanese corpus is the earliest extensive source of information on the Japanese language, some fragments of what is called Pre-Old Japanese are available through other sources, such as Chinese texts and various artifacts. The most important source is a Chinese text from the third century CE, which provides a relatively good description of the Japanese Wa polity during that time. In addition to that, it also provides important lexical information on the Pre-Old Japanese language.

The most important source is the Chinese text *Sānguó zhì* 三國志 (*History of the Three Kingdoms*), which was written during the third century CE. It was compiled by Chen Shou (233–297 CE) of Western Jin and contains the histories of the three Chinese states Wei 魏 (220–266 CE), Shu 蜀 (221–263 CE), and Wu 吳 (222–280 CE). The information relevant for the Japonic language family can be found in volume 30 of the *Book of Wei*. The section about the *Accounts of the Eastern Barbarians* 東夷傳 contains information on places to the east of the Chinese lands on the Korean peninsula and Japan. In Japanese scholarship, the section about the Wa state – the Chinese name for Japan at the time – is known by the Japanese word *Gishi-Wajinden* 魏志倭人伝. The section about the Wa people comprises about one fourth of the *Accounts of the Eastern Barbarians* as shown in Figure 6.

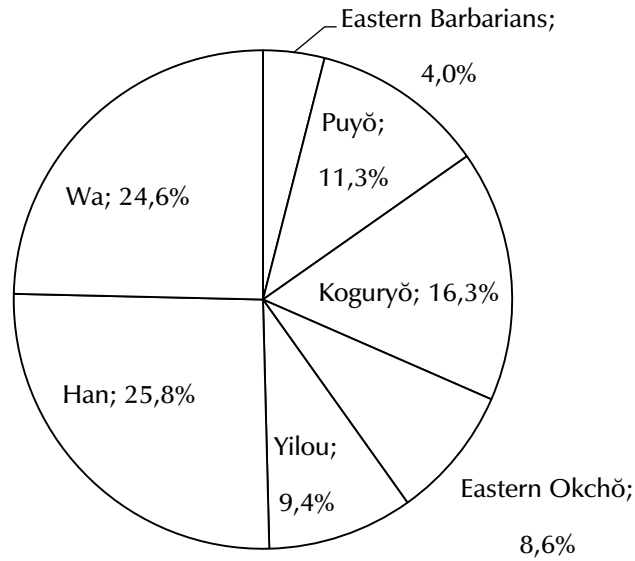


Figure 6: Graphic overview of *The Account of the Eastern Barbarians*

The account features brief explanations of the regions of Northeast Asia, the Korean peninsula and parts of the Japanese archipelago as they were seen by the Chinese Wei state. The section on the Japanese Wa is the most extensive of the whole record, which can roughly be grouped into three subsections.

The first part contains a description of how to get to the islands of the Wa, starting from the Chinese commandery in Daifang 帶方 in the northwest of the Korean peninsula. From there, distances and directions are given along the western coast of Korea until reaching the Japanese archipelago, from where distances and directions connect the Wa chiefdoms. A total of 29 chiefdoms are mentioned by name. Nine places are described in more detail and the record provides information on the political structure, such as the officials of each chiefdom, the population size and some information on its area.

The second part gives some general information on the Wa in terms of ethnology and their environment, such as customs and rituals, clothing and available animals and plants. Other information includes the social structure, family and their relations with the chiefdoms from the Korean peninsula. It also hints at how power was divided among the chiefdoms. The Wa had a female ruler, queen Himiko, who lived in a place called Yamatai (or Yamaichi; see section 4.1.3).

She used theurgy to govern the lands, which seems to appeal to the people. There is also a kingdom called *Kona* to the south of her border, which was in conflict with the queen's lands.

The last part is concerned with politics of the Wa chiefdoms and their relations with the Chinese government. It mentions several envoys going between the two faraway places and the exchange of tribute to enhance their connections. It states that Himiko reported about her conflict with the *Kona* kingdom to the Chinese and sought help. Shortly after this, Himiko died and was buried in a large mound. A young female relative called Iyo (sometimes interpreted as Toyo) followed Himiko in governing the Wa lands.

The Chinese records provide invaluable material of the Japanese language during the third century CE. In total, there are 29 place names, 16 titles, 6 personal names, 1 utterance and 1 ethnic designation. All entries are recorded with Chinese characters.

In order to analyze the Japanese language material underlying the Chinese transcriptions, the pronunciations of the Chinese characters during the third century need to be reconstructed. Schuessler (2009) provides the Chinese character readings for Middle Chinese (6th century CE), Later Han Chinese (first and second centuries) and Old Chinese, of which the reconstruction of Later Han Chinese is the closest to the time the *Gishi-Wajinden* was written. I have decided to omit the tones of the Chinese characters, as they do not affect the transcriptions of Pre-Old Japanese and are thus not relevant for reconstructing those forms. The Middle Chinese forms may be relevant when Later Han Chinese does not offer any clear Japanese equivalents. A more detailed description on the language material from this source and how to interpret the Chinese characters is given in part 3 and part 4.

2.3.2 Japonic language fragments from the Korean peninsula

Another important source for the Japonic language family can be found in place names from the Korean peninsula. These toponyms can mainly be found in volumes 35 and 37 of the 12th century Korean text *Samguk Sagi*. Christopher Beckwith considers them to be Japanese-Koguryoic, the ancestor language of both Japanese and Koguryō. While this interpretation is still disputed among

linguistics, it is generally agreed that those toponyms are clearly related to Japonic (Janhunen 2005:70). Some scholars refer to those Japonic language fragments as “Japanic,” which was first used by historical linguist Juha Janhunen in 1996 “in reference to the historical varieties of the Japanese language spoken on the Korean Peninsula in addition to those spoken on the Japanese Islands.” (Robbeets 2017:211, note 3). In this view, Japonic would strictly speaking only refer to language material from the Japanese islands, meaning Mainland Japanese and the Ryūkyū languages. I use the term Japonic in this thesis to refer to all the known language fragments, which includes language material from the Korean peninsula.

Beckwith compiled a list of glossed words and grammatical morphemes that can be identified as belonging to what he terms the Koguryō language. One needs to be careful with this naming practice, because this refers to language materials from an area that was once ruled by the Koguryō kingdom, but despite from somehow being related to Japonic, the underlying language is not known (and in my opinion most likely not the language of the Koguryō kingdom, as Beckwith claims). In his research Beckwith recorded about 130 entries from the former Koguryō kingdom (probably recorded in the 8th century CE) and a few lexemes of what he calls Archaic Koguryō from old Chinese sources (Beckwith 2004:236–237).

In order to understand how to use this language data, it is important to consider the political situation on the Korean peninsula during that time. There were several tribes and kingdoms and a variety of different languages present then. From ancient Chinese sources it is known that the area in the south of the Korean peninsula was the area of the three Korean Han states (collectively called Samhan; “Three Han”) Mahan, Pyōnhan and Chinhan, north of which was the area of the Koguryō and Puyō kingdoms. It is stated in the *Sanguo zhi* that the languages of Mahan and Chinhan were different, which indicates that they may have belonged to different language families. The Samhan states and Koguryō are the predecessor of the three kingdoms of Korea. The kingdom of Paekche followed Mahan, Silla followed Chinhan and Koguryō advanced its influence in the north. Between Paekche and Silla there was the Kaya (Kara) confederacy that developed

out of the Pyŏnhan states. See Figure 7 for the geography of the Three Kingdoms period in Korea (ca. 57 BC–668 CE).



Figure 7: Map of the Korean peninsula and the wider East Asian region during the time of the Koguryŏ kingdom (adapted from Beckwith 2004:xxii)

While scholars generally agree that these lexical items are indeed Japonic, there is much opposition to it being the language of the Koguryŏ kingdom (Pellard 2005:168–169). A common interpretation is that the area where the toponyms were found was only conquered by Koguryŏ after the place names were created. Therefore, it must be the language of the original inhabitants of the area that these toponyms belong to. Beckwith has pointed out that toponyms of the area in the south-eastern part of the Korean peninsula that belonged to Silla can be connected to the Korean languages, which indicates that the Silla kingdom (the ancestor state of Korea) spoke Korean (Beckwith 2010:216).

Juha Janhunen has stated that the Korean peninsula during that time was multiethnic, with six different languages being present in the area: Chinese, Korean, Japonic, Mongolic, Tungusic and Amuric (Janhunen 2005:76). Based on the geographical area of the Koguryŏ kingdom, he

assumes that Tungusic is most likely the languages family that should have been spoken in Koguryō. He connects the Silla area in the southeast to Koreanic and Japonic to the Paekche kingdom. One important point is that there might have been a difference in the language of the native population of an area and the ruling elite. In the case of Paekche he states that “[...] there is evidence of ‘bilingualism’ in Paekche, suggesting that part of the Paekche population may actually have spoken contemporary forms of Korean, while another part spoke the Paekche dynastic language, as used by the ruling elite of the kingdom” (Janhunen 2005:70).

Other authors claim that the toponyms should be considered as being part of the Koreanic language family. Alexander Vovin thinks that Japonic represents a substratum that can be detected in the languages of Paekche and Silla, but not in Koguryō (Vovin 2013:222). He concludes that Japonic was gradually replaced by languages closely related to Korean and thus the toponyms should be considered as “some variety of Old Korean” (Vovin 2013:224). Similarly, Nam Pung-hyun analyzes the toponyms to be a Korean dialect (Early Old Korean), but according to him, the languages of Koguryō, Paekche and Silla are all forms of Early Old Korean (Nam 2012:51).

While most scholars agree that Japonic spread to the Japanese archipelago from the area of the toponyms, there remains a considerable temporal gap between the time when the toponyms were recorded and the movement of Japonic to Japan. As I have shown earlier, it is highly likely that the emergence of the Japonic language in Japan is connected to the initial Yayoi immigrants that brought wet rice agriculture to Japan. They moved across the ocean to the Japanese archipelago in the initial stages of the Yayoi period (ca. 800 BC–300 CE). As the toponyms are considered to be from the 8th century CE, there is about a 1,500 year gap between immigration of Japonic speakers and the Japonic toponyms from the Korean peninsula. This problem needs to be addressed when researching the historical development of the Japonic language family and its spread from the Korean peninsula to the Japanese archipelago.

Part 3: Reconstructions

In this part I will explain the methodology of reconstruction for the Japonic language data recorded in Chinese sources from before the eighth century CE. First, I will explain how Chinese phonology from the time of the sources can be reconstructed to serve as a basis for evaluating the Japonic language fragments. Next, I will consider the phoneme inventory of the Chinese language of the sources as well as reconstructions of that of Proto-Japonic. This is done to better understand how Chinese scribes have dealt with transcribing the Japonic language during that time. The last section will deal with reconstructing the pronunciations of the Chinese sources, which will then be used for the philological analysis in part 4.

3.1 Historical Chinese phonology

The available data on the Japonic language forms from before the 8th century CE was recorded by Chinese scribes and thus transcribed using Chinese characters. This poses the problem of recovering the Japanese pronunciation of those transcriptions, because the pronunciation of Chinese characters also changed through the course of time. Therefore, the Japonic language underlying the fragments recorded in Old Chinese must be recovered by first reconstructing the pronunciation of the Chinese characters at the time when the Japonic words were written down.

There are several attempts to reconstruct the pronunciation of Chinese characters during history. The first extensive reconstruction was published in 1957 by Swedish linguist Bernhard Karlgren. Later approaches include that of Li Fang-kuei (1971; see Mattos 1974), Pulleyblank (1991), William Baxter (1992) and Laurent Sagart (1999) (Schuessler 2009:ix–x; xix). I will now give a brief overview of important research and the current state of reconstructions on those early pronunciations of Chinese characters.

Bernhard Karlgren's *Grammata Serica Recensa* was the first comprehensive study in western scholarship that reconstructed the pronunciations of Chinese characters for two specific stages, which Karlgren called “Archaic Chinese” and “Ancient Chinese.” His “Archaic Chinese” roughly refers to the early Zhou period (around 1,000 BC) and “Ancient Chinese” was spoken around 600

CE. Nowadays, those stages are called Old Chinese (OC) for “Archaic Chinese” and Early Middle Chinese (EMC)⁴ for “Ancient Chinese.”

It should be mentioned here that reconstruction in this context is different from the general practice of reconstruction in historical linguistics that is based on data from several languages, but rather reconstructs older stages of Chinese based on the Chinese writing system. The Chinese script is logographic and does therefore not provide pronunciations of earlier times. The pronunciations can be reconstructed using old sources from the relevant time period, such as the *Qieyun* 切韻 written by Lu Fayuan 陸法言 in 601 CE. The method for recording pronunciation of Chinese characters is called *fanqie* 反切, which groups characters based on their rhymes. The *Qieyun* was designed for providing readers of Chinese classics with a way of reciting them and has allowed researchers to recover the pronunciation of the characters around the year 600 CE.

There is still debate on whether this can be considered a synchronous language stage, or whether it should be considered a compromise that uses pronunciations from at least two dialects. It is clear that the pronunciation of the *Qieyun* reflects a literary language and it is not known how closely the actual speech of the people followed its instructions. Nevertheless, for my own purposes of recovering the pronunciation of Japonic words recorded in Chinese sources, the literary standard for pronunciation is exactly what I want to use for reconstruction, as I expect that scribes applied some kind of standard pronunciation when transcribing foreign words to ensure that it would be read correctly by fellow Chinese scholars.

One remaining problem is that there is a gap between the time for which the Chinese pronunciations can be reconstructed and the time when the Japonic words were recorded. The main corpus of Pre-Old Japanese in the *Gishi-Wajinden* was recorded about 350 years before the pronunciations in the *Qieyun* (EMC).

An earlier stage of Chinese (OC) predates the Japanese words by about 1,250 years. These reconstructions are based on several sources, the most important of which is the *Shijing* 詩經 (*Book of Odes*). It consists of about 300 poems/odes that make use of rhymes. Through this, the

⁴ For brevity often simply referred to as Middle Chinese (MC).

characters can again be grouped in rhyme groups. Other information for the reconstruction of OC pronunciations are the reconstructed MC pronunciations that I have described earlier.

Another important method is researching the phonetic elements of the Chinese characters that give some information on the pronunciation of a character during the time the Chinese characters were created. When the Chinese script was developed, a part of the characters indicated how this character should be pronounced. Making use of this information also allows for a grouping of characters with the same phonetic elements, which can then be used for the reconstruction of OC pronunciation.

The reconstructions of EMC and OC have in the past been readjusted by several researchers following inaccuracies that were discovered in Karlgren's work. More recent research has also made use of different Chinese language/dialect data for reconstruction as well as Chinese loan words in other languages such as the Vietic languages, the Hmong-Mien languages and the Kra-Dai languages (Baxter and Sagart 2014:34–37). For the purposes of my thesis, neither the reconstruction of OC, nor the EMC pronunciation is satisfactory, because it does not provide the pronunciation of Chinese characters that were used by Chinese scribes of the third century CE.

The closest reconstruction to the Japanese words of the *Gishi-Wajinden* are from the late Han period (about the second century CE). W. South Coblin reconstructed the Eastern Han phonology by relying on Eastern Han period sound glosses, Buddhist inscriptions and dialectal data. Axel Schuessler later further advanced the research on Later Han Chinese. He points out that Later Han Chinese “retains most of the [*Qieyun*] categories but is about 500 years older and simpler than MC” (Schuessler 2009:29).

Later Han Chinese (LHan or LH) is the earliest form of Chinese which can be set up without relying heavily on interpretations of phonetic series and morphological speculations. The transcription of LHan forms are much simpler than Karlgren's/Li's traditionally quoted MC in that it avoids most of the diacritical clutter and is written in the way modern Chinese dialects are recorded. It also antedates MC by almost half a millennium. At the very least, LHan can be viewed as MC written in a simple notation and adjusted by evidence from Han data.

Originally I suggested that LHan represents a hypothetical conservative strain of the language of about the 2nd century AD. After completing this manual it occurred to me that a more fitting name for this language should be Mid-Han Chinese (MHan), as that stage still had all those

features which survived as archaisms in later dialects, and which have been taken into consideration for the conservative LHan forms for this manual. (Schuessler 2009:xi)

For the purposes of this paper I will rely on the Later Han Chinese pronunciations proposed by Schuessler (2009) for reconstructing the Japonic words recorded in the old Chinese text from the third century CE *Gishi-Wajinden*. However, I will not make use of his reconstructions of tone in those pronunciations, because Japonic was not a tonal language and thus this does not contribute any useful information to the reconstructions. Additionally, removing the tone marks makes the Chinese character pronunciations more readable. I have therefore excluded tone marks from Schuessler.

3.1.1 Sound inventory of Later Han Chinese

It will be useful to first consider what sounds we can expect in each language stage to enable better reconstructions. It is important to see what Japonic sounds Chinese scribes may have not been able to transcribe properly, because they did not have them in their own language and thus there was no character to transcribe them. On the other hand, the pronunciations of the Chinese characters should not be seen as a completely faithful representation of the sounds of the Japanese language, but rather an approximation of it. This has also been pointed out by several scholars who noticed that Chinese scribes seemed to have used characters with derogatory meanings intentionally for transcribing foreign words of the people they often grouped together as ‘Eastern Barbarians’ 東夷 (Miyake 2003:106). I will point out these characters in the analysis section.

Axel Schuessler states that LHC “consonants and almost all vowels are the same as in MC, but high medial glides [...] are Han period innovations” (Schuessler 2009:29). The EMC (Early Middle Chinese) initial consonant system, which is closest to that of LHC, is provided in Table 1:

		Bilabial	Alveolar	Retroflex	Palatal	Velar	Glottal
Nasals		m	n	ɳ	ɲ	ŋ	
	[-v]	p	t	ʈ	c	K	ʔ
Plosives	[+h]	p ^h	t ^h	ʈ ^h	c ^h	k ^h	
	[+v]	b	d	ɖ	ɟ	G	
	[-v]		ʈs	ʈʂ	ʈɕ		
Affricates	[+h]		ʈs ^h	ʈʂ ^h	ʈɕ ^h		
	[+v]		ɖʒ	ɖʐ	ɖʑ		
Fricatives	[-v]		s	ʂ	ɕ	X	
	[+v]		z	ʐ	ɟ	ɣ	
Approximants		w	l		j		

Table 1: Early Middle Chinese initials (adapted from Pulleyblank 1991:15)

3.1.2 Sound inventory of Middle Chinese

In contrast to this, Baxter does not reconstruct /w/ and /ɣ/ for Middle Chinese initials, but adds /h/. See Table 2:

		Bilabial	Alveolar	Retroflex	Palatal	Velar	Glottal
Nasals		m	n	ɳ	ɲ	ŋ	
	[-v]	p	t	ʈ	c	K	ʔ
Plosives	[+h]	p ^h	t ^h	ʈ ^h	c ^h	k ^h	
	[+v]	b	d	ɖ	ɟ	G	
	[-v]		ʈs	ʈʂ	ʈɕ		
Affricates	[+h]		ʈs ^h	ʈʂ ^h	ʈɕ ^h		
	[+v]		ɖʒ	ɖʐ	ɖʑ		
Fricatives	[-v]		s	ʂ	ɕ	X	h
	[+v]		z	ʐ	ɟ		
Approximants			l		j		

Table 2: Middle Chinese initials (adapted from Baxter 1992:45)

Even though the EMC sound inventory provided by Pulleyblank above is closer to the LHC pronunciations in terms of their time they were used, it seems that sounds contained in both systems need to be considered for Schuessler's LHC reconstructions. (Unfortunately, Schuessler does not provide a table of the initial consonants for LHC.)

3.2 Old Japanese

The written sources from the eighth century CE allow for the reconstruction of the Old Japanese sound inventory. Although the first writings in Japan were essentially written in Chinese characters, the *Man'yōshū* anthology uses these characters mainly as a syllabary for transcribing Old Japanese sounds. It is therefore possible to reconstruct consonant-vowel sequences and from that the phonological system of Old Japanese. As there are still some problems in interpreting the Chinese characters that were used, I will describe these important issues in more detail in the following sections.

Old Japanese is considered as the language state of the eighth century CE and coincides with the Nara period (710–794). Later stages of the Japanese language are roughly categorized with political periods in the history of Japanese. Early Middle Japanese refers to the Heian period (794–1185), Late Middle Japanese to the Kamakura (1185–1333) and Muromachi periods (1333–1573). Modern Japanese refers to the time from around 1600, starting with the Edo period (1603–1868) and extending across the ensuing Meiji period (1868–1912), Taishō period (1912–1926), Shōwa period (1926–1989), Heisei (1989–2019) and Reiwa (from 2019) (see Frellesvig 2010:1).

3.2.1 Phonology

There are several graphs that were used for transcribing native Japanese words. These can be organized in a grid that shows the syllables that were recorded for Old Japanese.

a	i		u	e		o	
ka	ki ₁	ki ₂	ku	ko ₁	ko ₂	ko ₁	ko ₂
ga	gi ₁	gi ₂	gu	go ₁	go ₂	go ₁	ge ₂
sa	si		su	se		so ₁	so ₂
za	zi		zu	ze		zo ₁	zo ₂
ta	ti		tu	te		to ₁	to ₂
da	di		du	de		do ₁	do ₂
na	ni		nu	ne		no ₁	no ₂
pa	pi ₁	pi ₂	pu	po ₁	po ₂	po	
ba	bi ₁	bi ₂	bu	bo ₁	bo ₂	bo	
ma	mi ₁	mi ₂	mu	mo ₁	mo ₂	mo ₁	me ₂
ya			yu	ye		yo ₁	yo ₂
ra	ri		ru	re		ro ₁	ro ₂
wa	wi			we		wo	

Table 3: Grapheme system of Old Japanese (adapted from Frellesvig 2010:27)

Every syllable could be represented by several different Chinese graphs. For the 88 possible syllables outlined in Table 3, almost 200 different graphs were used. For example, Vovin records these characters for transcribing the Old Japanese syllable *na* in *Man'yōshū* Book 5: 那 奈 寧 難 南 (Vovin 2010:4).

The distinction between some of the syllables was first discovered by the Japanese linguist Hashimoto Shinkichi, who published his findings in 1915 (Frellesvig 2010:28). Shinkichi found out that:

forms such as *ni-keri* 'perfective-modal.past', *ke-mu* 'pastconjectural', *kerasi* 'past. presumptive', and *kepu* 'today' were written exclusively with characters from one set, comprising e.g. 家 and 計, whereas words such as *take* 'bamboo', *sake* 'sake', and *take* 'mountain, peak', *nageki* 'sigh', *sigesu* 'thick, dense (of growths)' were written exclusively with characters from another set, comprising e.g. 氣 (*ke*) and 既 (*ke*), 宜 (*ge*). (Shinkichi, cited in Frellesvig 2010:28)

Generally, this distinction applies to texts from the Nara period written in Central Old Japanese. The few Eastern Old Japanese texts do not have this syllable distinction. Sources after the Nara period do not have this distinction anymore, so it is clear that the distinction only existed in Old Japanese sources from the Nara period. The two groups merged in the Heian period, i.e. *ki₁* and *ki₂* became *ki* and so on. I will discuss this syllable distinction in more detail in the section below.

3.2.2 Transcription of vowels and diphthongs

One problem in the understanding the vowel system stems from the first Japanese written sources from the eighth century CE. This is known as the *kō-ruī-otsu-ruī* (甲類・乙類 ‘A-type–B-type’) syllable distinction:

Corresponding to a number of MJ syllables with the vowels /i/, /e/, and /o/, OJ had two of each, so that where MJ for example, like NJ, had the k-initial (short) syllables /ka, ki, ku, ke, ko/, OJ had what may fairly neutrally be transcribed as /ka, ki₁, ki₂, ku, ke₁, ke₂, ko₁, ko₂/, with OJ /ki₁, ki₂/ merging as MJ /ki/, OJ /ke₁, ke₂/ > MJ /ke/, and OJ /ko₁, ko₂/ > MJ /ko/. /Ci₁/ ≠ /Ci₂/ and /Ce₁/ ≠ /Ce₂/ were distinct when the onset consonant was /p, k, b, g, m/, while /Co₁/ ≠ /Co₂/ were distinct when the consonant was /t, k, s, d, g, z, (m,) n, r, w, y/. It is usually agreed that the distinction resided in the part of the syllable following the onset consonant, but other than that the phonetic and phonemic reconstruction and definition of these syllables is still debated [...] (Frellesvig and Whitman 2008:3)

There are several different systems for transcribing the OJ vowel qualities. In the table below I am providing some important systems for transcribing Old Japanese graphs (from Frellesvig *et al.* 2019⁵). In recent publications, the index notation and that of Frellesvig & Whitman seem to have been used most often. In older sources, the system suggested by Japanese linguist Ōno Susumu is also frequently used. For the sake of simplicity, I will use the Frellesvig & Whitman system in this thesis, unless I am citing sources that use a different system.

Syllable type	Index notation	Ōno	Frellesvig & Whitman
<i>kō-ruī</i>	i ₁	i	i
<i>otsu-ruī</i>	i ₂	ĩ	wi
neutral	i	i	i
<i>kō-ruī</i>	e ₁	e	ye
<i>otsu-ruī</i>	e ₂	ě	e
neutral	e	e	e
<i>kō-ruī</i>	o ₁	o	wo
<i>otsu-ruī</i>	o ₂	ö	o
neutral	o	o	o

Table 4: Comparison of OJ transcription systems (based on Frellesvig *et al.* 2019)

⁵ <http://vsarpj.orinst.ox.ac.uk/corpus/display.html> (retrieved: 2019-08-25)

The OJ transcription practice of the early OJ sources is thought to reflect five vowels /i, e, a, o, u/ and three sequences transcribing the diphthongs /je, wi, wo/ (consisting of a glide and a vowel; /j/ and /w/ also exist as consonants).

Since the exact phonological interpretation is not agreed upon as of yet and this thesis is not trying to answer this question, I will use the transcription practice outlined by Frellesvig and Whitman (2008). It should not be seen as an interpretation of the Old Japanese pronunciation, but rather as a transliteration of the different groups of graphs that are used in the OJ corpus. The question of the concrete nature of the different syllables needs to be dealt with in future research.

3.2.3 Vowel in free forms and bound forms

In some OJ nouns there are alternating realizations of vowel qualities in the final syllable. When the word appears as the first part of a compound, it is referred to as bound form (*hifukukei* ‘embedded form’), while word-final position of the noun is referred to as free form (*roshutsukei* ‘exposed form’). Generally, the bound form is interpreted as the original form of the noun and the free form as a later development (Frellesvig and Whitman 2008:19). To illustrate this point, I would like to provide some examples (adapted from Frellesvig and Whitman 2008:20):

free form	bound form
<i>kwi</i> ‘tree’	<i>ko-dati</i> (‘stand’) ‘grove’
<i>kwi</i> ‘yellow’	<i>ku-gane</i> (‘metal’) ‘gold’
<i>me</i> ‘eye’	<i>ma-pye</i> (‘side, direction’) ‘front’
<i>se</i> ‘back’	<i>so-muku</i> ‘turn’

Table 5: Apophony in OJ nouns

One common explanation for this alteration is the contraction of the original root-final with an *i*-suffix, which could be interpreted to be a subject marker *i* (a). Other interpretations are that the apophonic nouns derive from consonant-final shapes, with the final consonant being lost before *i (b). Yet another possibility is that the apophonic nouns ended with the final consonant *-r,

which weakened to a yod in final position (c). Below is one example for all three possibilities (Frellesvig and Whitman 2008:20).

	(a)	(b)	(c)
<i>kwi</i> ‘yellow’	< *ku-i	< *kur-i	< *kur

Table 6: Possible origin of the free form of apophonic nouns

Depending on when the split of Japonic into Ryūkyūan and Japanese happened, the reconstructed Proto-Japonic form may be temporally relatively close to that of Pre-Old Japanese. However, since scholars did not agree on a date of the split of the Japonic language family yet, I will focus more on the question of whether the Proto-Japonic forms should be considered to predate or postdate the Pre-Old Japanese forms.

3.2.4 The development of voiced obstruents

As the frequency of the voiced obstruents in the Old Japanese corpus is comparatively low, it may be asked whether they have appeared in the language only relatively recently and possibly developed only in certain phonological contexts.

The most common interpretation is that the voiced obstruents have developed from medial clusters with nasals and voiceless obstruents. This view goes back to Ramsey and Unger, who explain it as “syncope and progressive assimilation” (Ramsey and Unger 1972:278). This would then result in the sound changes shown in Table 7.

PJ		OJ
*-mp-, *-np-	>	<i>b</i>
*-mt-, *-nt-	>	<i>d</i>
*-ms-, *-ns-	>	<i>z</i>
*-mk-, *-nk-	>	<i>g</i>

Table 7: (from Miyake 2003b:73)

To better understand how the sequence nasal–vowel–voiceless obstruent developed, I would like to give an example that illustrates the point well.

[T]he -z- in the OJ title 武良自 *murazi* (MYS 1439 preface) originated from the sequence *ns < *n-u-s in *mura-nusi ‘village-master’ (Martin 1987: 488); the *-u- dropped out and the remaining *ns became OJ z. (Miyake 2003b:73)

Ramsey and Unger propose the following rule for medial position (voiced obstruents never appear in initial position in Old Japanese): {m, n} + V + {p, t, k, s}. This describes the development of voiced obstruents as allophones in the 7th century (Ramsey and Unger 1972:278). For research on the Pre-Old Japanese corpus it will therefore be important to find out whether the available data points to voiced obstruents already being present in the language or not.

Unfortunately, the corpus is not large enough to answer this question for the stage of Pre-Old Japanese. Some entries from the *Gishi-Wajinden* do feature sequences that could point to at least one medial voiced obstruent /g/:

Chinese graphs	LHC transcriptions	Note
躬臣	*kuŋ-gin	Toponym
柄渠觚	*piaŋ-gia-kuo	Title (Third official (Ito))
伊聲耆	*ʔi-sen-gi	Personal name

Table 8: Possible transcriptions of voiced obstruents in the *Gishi-Wajinden*

3.2.5 Phonology and allophones

From the Old Japanese corpus, it is thought that Old Japanese had thirteen consonants (/w/ and /j/ are also full consonants, not to be confused with the semivowels in the transliteration of graphemes with diphthongs) (see Table 5). There are still some problems in the study of the vowel inventory of Old Japanese and I am not able to provide a complete set of Old Japanese vowels. It is clear that the Old Japanese vowel system developed into a five-vowel system consisting of /a, i, u, e, o/ shortly after the Old Japanese corpus, which is known as Early Middle Japanese. The sequences of diphthongs that were written with specific graphemes merged into plain vowels.

p b	t d	k g
	s z	
m	n	
w	r	j

Table 9: Old Japanese consonant inventory

Based on the *Oxford Corpus of Old Japanese*, the relative frequency of the transcribed syllables can be determined. As the vowel qualities are still unknown, I have listed them in the form they appear from the Heian period, meaning that this is the transliteration after the two groups merged. It is also clear to see here that voiced consonants are comparatively rare in this corpus.

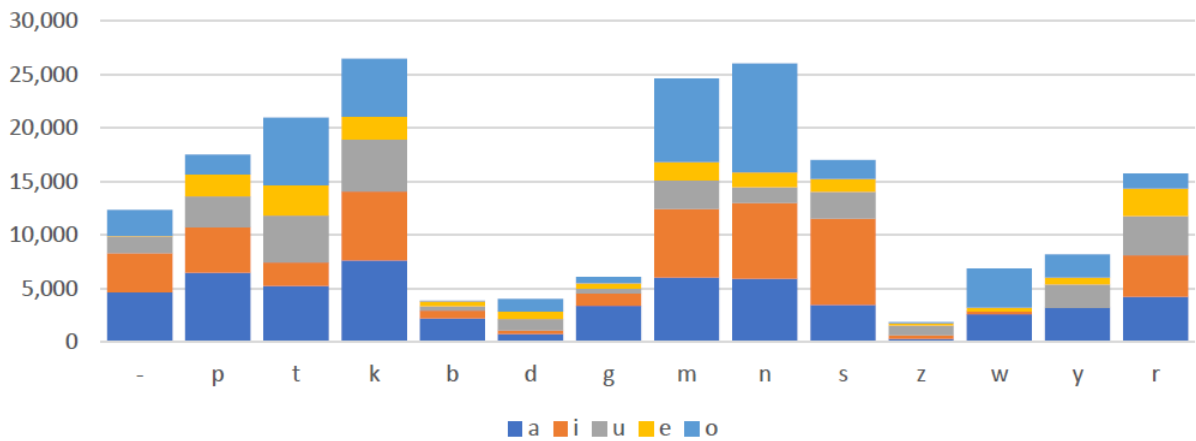


Figure 8: Syllables transcribed with graphemes in the Old Japanese corpus

3.2.6 Sound changes between Old Japanese and Modern Japanese

Bjarke Frellesvig lists several important sound changes that occurred in the development of the Japanese language and also provides an approximate dating of these sound changes. I will provide a brief overview here, because some common transliterations of old language forms from the Pre-Old Japanese corpus are often based on the equivalent Modern Japanese form that the word refers to (i.e. /h/ instead of /p/ in the first consonant of Himiko).

Sound change	Approximate date	Information
Cye > Ce	< 800	Loss of <i>kō-otsu</i> distinction
Cwo > Co	< 950	Loss of <i>kō-otsu</i> distinction
.ye > .e	ca. 950	Merger of /ye/ and /e/
/-p-/ > /-w-/ _/i, e, a, o/	950–1000	Merger of medial /p/ and /w/
.w > Ø _/o/	ca. 1000	Loss of syllable initial /w/ be-
medial position -w > Ø _/i,e/	ca. 1100	Loss of syllable initial /w/ be-
initial position #.w > Ø _/i, e/	ca. 1300	Loss of syllable initial /w/ be-
/ĩ/ > /I/	early LMJ	Merger of /ĩ, ũ/ and /I, U/
/p/ > /f/	early? LMJ	Fricativization
/iU/ > /yuu/	mid? LMJ	Monophthongization of /VU/
d > z /_{i, u}	17th century	Merger of /d/ and /z/ before /i,
/ɔɔ/ > /oo/	17th century	Merger of /ɔɔ/ and /oo/
/f/ > /h/	?1700	Delabialization
/kwa, gwa/ > /ka, ga/	late 19th century	Loss of /w/ after /k, g/

Table 10: Main regular phonemic changes in the development of Japanese (adapted from Frellesvig 2010:414–415)

This list is of course not exhaustive, but it gives a good overview for readers unfamiliar with the Japanese language and hopefully allows for a better understanding of transliterations of Japanese terms.

3.3 Ryūkyūan phonology

For Proto-Ryūkyūan, Thorpe reconstructs a similar system as Old Japanese had. The vowel system includes five short vowels, which is the same as the Modern Japanese system. Below I have provided the vowel inventory in Table 11.

*i	*u
*e	*o
*a	

Table 11: Vowel system of Proto-Ryūkyūan (Thorpe 1983:32)

Thorpe seems not to reconstruct any long vowels or diphthongs for Proto-Ryūkyūan, but they are certainly present in some Ryūkyūan languages.

As for the consonant system, Thorpe reconstructs a system similar to Old Japanese, which is given in Table 12. One important observation is that he reconstructs voiced obstruents on the phonemic level. This is important, because the Pre-Old Japanese corpus can be analyzed as to how voicing was represented by the Chinese transcriptions of the language. If it could be shown that voiced obstruents developed after the Pre-Old Japanese corpus, then Ryūkyūan and Japanese must have either separated after the third century CE, or both languages developed voiced obstruents individually. Thorpe also reconstructs two syllabic consonants, which he writes as the obstruent Q and the nasal N (Thorpe 1983:14).

p b	t d	k g
	s z	
m	n	
w	r	j

Table 12: Phoneme system of Proto-Ryūkyūan (Thorpe 1983:13)

3.4 Proto-Japonic

Based on Ryūkyūan language data as well as historical and dialectal sources on Japanese a common ancestor language called Proto-Japonic can be reconstructed. It is not necessarily clear what time Proto-Japonic would refer to and whether it can be reconstructed in a way to represent a consistent language stage that has actually been spoken in the past. Based on the available sources, many aspects of the language that split into the Japanese and Ryūkyūan branches can be recovered, but this cannot be done with complete certainty in every case. I will therefore provide the information important for this thesis and what is generally agreed upon by researchers about Proto-Japonic. I will mainly focus on reconstructions on the sound inventory and accent system of Proto-Japonic.

3.4.1 Sound inventory

In this section I will introduce scholarly opinions on the sound inventory of Proto-Japonic. First, I will show proposals of the consonant inventory and some of the problems that remain. Following

this, the vowel inventory including diphthongs will be treated. The implications for the sound inventory of Pre-Old Japanese will also be covered when relevant.

Bjarke Frellesvig and John Whitman reconstruct the following basic onset consonants for Proto-Japonic: /*p, *t, *k, *s; *m, *n; *r/. There is still debate on whether voiced consonants should be reconstructed for Proto-Japonic. For example, it is not clear whether OJ /w, j/ should be reconstructed as Proto-Japonic /*w, *j/, or – if we accept the reconstruction of voiced obstruents – whether they may have developed from /*b, *d/. Additionally, J. Marshall Unger argues that Proto-Japonic had the phonemes /*g, *ŋ, *z/, which are reflected in OJ as /Ø, Ø-s, g/, but this seems not to be the common opinion among scholars (Frellesvig and Whitman 2008:3).

The voiced consonants in OJ are commonly thought to have developed after the Proto-Japonic stage in word-medial position and were pronounced with a nasal onset. Therefore, they are thought to have developed “as contractions of sequences of nasal and tenues /p, t, k, s/” (Frellesvig and Whitman 2008:3). It thus seems plausible that voiced consonants were allophones of their unvoiced counterparts in nasal environments and should not be reconstructed for Proto-Japonic. The possible sound inventory for Proto-Japonic is given in Table 13.

*p	*t	*k
	*s	
*m	*n	
*w	*r	*j

Table 13: Proto-Japonic consonant inventory

3.4.2 The Proto-Japonic vowel system

For the vowel inventory of Proto-Japonic there are several hypotheses which have been proposed in the past. I will examine some important proposals and show some of the problems that still exist with its reconstruction.

For a long time, the most common reconstruction was that of a four-vowel system with the vowels /*i, *a, *u, *ə/, which are reflected in OJ as /a, i, u, o/. In the 1970s, the Japanese linguist Hattori Shirō challenged this view and based on Ryūkyūan evidence added the two vowels /*e,

*o/ to Proto-Japonic (Frellesvig and Whitman 2008:5). More recently, Frellesvig and Whitman have proposed the additional vowel /*i/ and constructed a seven-vowel system for Proto-Japonic. This was based on internal reconstruction and dialect comparison and also Japanese/Korean comparative evidence (Frellesvig and Whitman 2008:15). For Pre-Old Japanese, Marc Miyake has shown that in addition to the four vowels mentioned above, *e and *o were likely also part of the vowel inventory of Pre-Old Japanese (Miyake 2003).

For Pre-Old Japanese, there are several options for diphthongs, which according to Frellesvig and Whitman (2008:16–17) developed into OJ as follows:

OJ	Pre-OJ	
	7-vowel system	4-vowel system
wi	*ui, *ii	*ui, *ɤi
e	*ɤi, *ai	*ai
-ye	*ii, *iɤ, *ia	*ia, *iɤ
-wo	*ui, *uɤ, *ua	*ua, *uɤ

Table 14: Correspondence of Pre-OJ and OJ diphthongs

Marc Miyake also mentions other hypotheses on the Proto-Japonic vowel system, such as the five-vowel system by J. Marshall Unger, the six-vowel system of Leon Serafim, the seven-vowel system by Hattori Shirō and the nine-vowel system by Maner Thorpe (Miyake 2003:85—86). Miyake posits the following vowel system for Pre-(Central) Old Japanese, which according to him developed after the raising of Proto-Japonic *e and *o to *i and *u:

(*i, *e >) *i	(*ɤi >) *i	(*u, *o >) *u
	*ɤ	
*ia (> ɛ?)	*a, *ai	*au, *ua (> ɔ?)

Table 15: Vowel inventory of Pre-Old Japanese according to Miyake (2003:90)

3.4.3 Vowel raising

One important issue for determining the split of Japonic is that of mid-vowel raising, which is thought to have happened before the stage of Old Japanese. Marc Miyake hypothesized that a

chain shift took place between Proto-Japonic and Old Japanese. The Proto-Japonic vowels *e and *o rose to *i and *u and the diphthong *əi to *iy (Miyake 2003:89–90). “The raising of *e, *o, and the diphthong *əi resulted in an unbalanced pre-COJ [(Central-Old Japanese)] vowel system with only one mid vowel. [...] The chain shifts restored balance to the COJ vowel system” (Miyake 2003:90). Consequently, diphthongs monophthongized and raised.

PJ *e	> COJ <i>yi</i> (*i)	PJ *ia	> COJ <i>ye</i> (*e)
PJ *o	> COJ <i>u</i> (*u)	PJ *au, *ua	> COJ <i>o</i> (*o)
PJ *əi	> COJ <i>iy</i> (*iy)	PJ *ai	> COJ <i>ey</i> (*iy)

Table 16: Chain shift that occurred between Proto-Japonic and Old Japanese according to Miyake (2003:90)

3.4.4 Accent

The reconstruction of Proto-Japonic accent is a very promising area of research for understanding the early developments of the Japonic language family. The information available for reconstruction are modern dialectal data of Japanese and Ryūkyūan and historical materials such as the dictionary *Ruiju myōgishō* 類聚名義抄 (11th century CE). The dictionary includes “so-called tone dots that were added to texts [...] and indicated which syllables or moras of the language had /H/, /L/, /F/ or /R/ tone” (De Boer 2011:1)⁶. However, it only records the accent pattern of the central Kyōto dialect. There is still debate among scholars whether this pattern should also be reconstructed for Proto-Japonic, or whether it was a later development.

According to Hattori’s reconstructions, there are five accent classes for disyllabic nouns as shown below (H=high tone, L=low tone, F=falling tone, R=rising tone):

⁶ H=high tone, L=low tone, F=falling tone, R=rising tone.

	2.1	2.2	2.3	2.4	2.5
Kyōto	HH(H)	HL(L)	HL(L)	LL(H)	LH(L)
Tōkyō	LH(H)	LH(L)	LH(L)	HL(L)	HL(L)
Morioka	LL(L)	LL(L)	LH(L)	HL(L)	HL(L)
Takamatsu	HH(H)	HL(L)	HH(H)	LL(H)	LF(L)
Kagoshima	LH(L)	LH(L)	LL(H)	LL(H)	LL(H)
Myōgishō	RR(R)	RE(R)	EE(R)	ER(R)	ER(E)
Proto-Japonic	*HH(F)	*HF(L)	*LH(L)	*LH(H)	*HL(L)

Table 17: Accent classes for disyllabic nouns (from Shimabukuro 2007:29)

For the system of Ryūkyūan, Thomas Pellard points out that the “tone (or pitch-accent) system [of] Ryukyuan has lost many tonal distinctions, and many Ryukyuan tone systems *superficially* resemble those of the southern Kyūshū Japanese dialects.” The Ryūkyūan system preserves distinctions absent in Japanese (Pellard 2011:60).

S. Kyūshū	E. Kyūshū	MJ	PJ	PR	Amami	Okinawa	Miyako	Yonaguni
LH	LH(=H)	<div> <div>2.1</div> <div>2.2</div> </div>	<div> <div>2.1</div> <div>2.2</div> </div>	<div> <div>A</div> <div>B</div> <div>C</div> </div>	LH	LH	HH-LL-LL	LH
	LH(=L)	2.3	<div> <div>2.3a</div> <div>2.3b</div> </div>			LR	HH-LL-HH	LL
HL	HL	<div> <div>2.4</div> <div>2.5</div> </div>	<div> <div>2.4a</div> <div>2.4b</div> <div>2.5a</div> <div>2.5b</div> </div>		HL	HL	HH-HH-LL	LH(L)

Figure 9: Proto-Japonic tone correspondences for dissyllables (adapted from Pellard 2011:61)

The modern Japanese accent system is often described as pitch-accent system, but the system can also be analyzed in terms of tones (De Boer 2010:11). Reconstructing the accentual history of Japanese is a controversial topic. In modern Japanese, there are four main accent types, as can be seen in Figure 10 below.

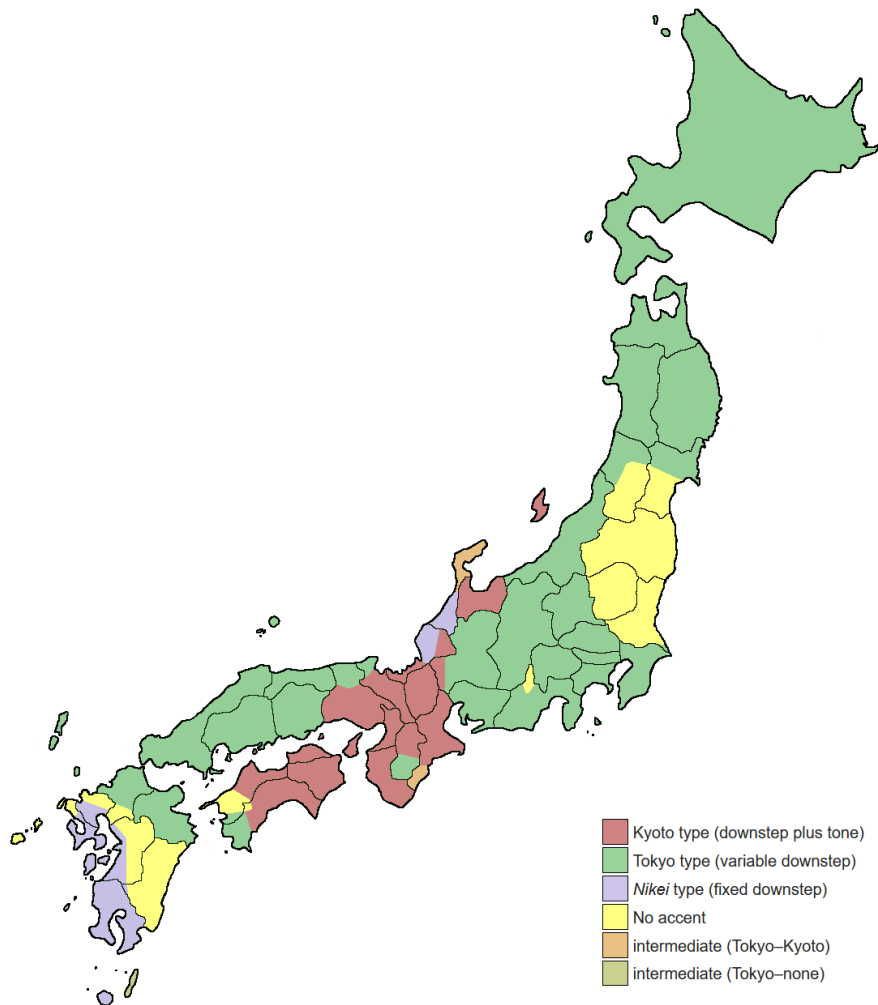


Figure 10: Accentual types of Japanese⁷

The two most common types of accent in Japanese are the Kyōto-type and the Tōkyō-type accent. Another minor accent type is the Kagoshima type of southern Kyūshū. The Kyōto- and Tōkyō-type accents appear to be exactly opposite, but it is still unclear which of the systems is the original one:

What is really behind this difference in pronunciation, is a difference in the location of the H tone (or ‘accent’). In central Japan, the H tones are located one syllable earlier in the word than in the surrounding dialects. This means that in one of the two regions, the tones shifted. They shifted towards the beginning of the word in Kyoto or they shifted towards the end of the word in the surrounding Tokyo type dialects. (De Boer 2017:3)

⁷ Adapted from https://en.wikipedia.org/wiki/File:Japan_pitch_accent_map.png (retrieved: 2019-08-25)

In the Kagoshima type there are two distinct word-melodies that are mapped over a word as a whole phrase as opposed to a H tone being linked to specific syllable in the word (De Boer 2017:3). For the development of the Japanese accent system there are two major theories, which have been put forward by Kindaichi Haruhiko (1975) and S. Robert Ramsey (1979). The main question is whether the Tōkyō-type accent is more conservative than the Kyōto-type accent as Ramsey proposes, or vice versa that the Kyōto-type accent is more conservative, as Kindaichi has it (Shimabukuro 2007:7).

According to Shimabukuro, there are several correlations of accent with other language features. He states that “[i]n the case of Japanese and Ryūkyūan [...] there are three kinds of correlations between suprasegmentals and segments or other suprasegmentals: one between accent shift and devoiced vowel [...], one between voicing in initial consonant and initial pitch height [...], and one between low register and vowel length” (Shimabukuro 2007:8).

There is still debate on whether vowel length should be reconstructed for proto-Ryūkyūan or even for proto-Japonic. Some scholars reconstruct vowel length in proto-Ryūkyūan only for the first syllable of certain groups of words (De Boer 2010:238). Others have proposed that vowel length is linked to tone. “Martin proposed the idea that the primary phonetic manifestation of initial /L/ tone in proto-Japanese may have been vowel length” (cited in De Boer 2010:238). De Boer pointed out that there is no strong evidence for proto-Ryūkyūan vowel and it can rather be explained “as a regional innovation that does not have to be projected back onto proto-Ryūkyūan” (De Boer 2010:239). She thus considers “Kindaichi’s idea that vowel length is a secondary development more convincing” (De Boer 2010:234).

3.5 Japonic fragment corpus

In this section I will provide the corpus of the Japonic fragments that I am going to work with in the analysis part of this thesis. This includes mostly the inscriptions from the *Gishi-Wajinden*, which I have mentioned before and information from the Koguryōic toponyms. I will start with the *Gishi-Wajinden*.

Those recorded place names that can be related to Japanese names are the most valuable data for understanding how Chinese scribes were writing down the Japanese language during the third century CE. In the geographical section of the *Gishi-Wajinden* there is a brief description where these places were, which allows us to look for Modern Japanese equivalents. The two islands of Tsushima 対馬 and Iki Island 壱岐島 that lie between the coast of south Korea and the north of the Japanese island of Kyūshū give the first clues. Tsushima was transcribed as 對馬 LHC *tuəs-ma. Iki island was transcribed as 一大 LHC *ʔit-das, but this is commonly considered a scribal error, the correct form being 一支 LHC *ʔit-kie. Schuessler gives as pronunciation for LHC 支 *kie>tse, which would mean that the pronunciation of *kie was still applicable during the mid-third century CE.

The next areas that are mentioned in the *Gishi-Wajinden* are regions in the north of Kyūshū islands. The first one is 末廬 LHC *mat-lɔ which can be connected to the area around Matsuura river 松浦川 in the city of Karatsu 唐津. The next area is to the east and written as 伊都 LHC *ʔi-tɔ. This can be connected to the first part in the name of the Itoshima 糸島 peninsular.

There is only one more toponym that can be located in the north of Kyūshū. This is recorded as 奴 LHC *na and was supposedly a relatively large polity in the north of Kyūshū. The biggest city in the north of Kyūshū is Fukuoka 福岡, but the name from the *Gishi-Wajinden* can still be connected to the area, even though the present-day city has a different name. This is possible through an artifact unearthed in the area of Fukuoka, namely a gold seal found on the island of Shikanoshima 志賀島 off the coast of Fukuoka (Fogel 2012:351). On its base it is inscribed with the characters 漢委奴國王, which can be translated as “Ruler of the state [Na] in the land of Wa under the Han” (Seeley 1991:9). This shows the position of the Wa 委 polity (the name of Japan before the year 670 CE) in the tribute system of the Chinese Han dynasty. Thus, it was bestowed on the ruler 王 of the Na chiefdom 奴國 of the Wa polity.

This can also be confirmed in an entry from the Chinese chronicle *Hou Hanshu* 後漢書 (5th century CE) dated to the year 57 CE, which records that the Na chiefdom of Wa sent an envoy with tribute to the Chinese Han state, where they received a seal from emperor Guangwu 光武 of

Han. According to this entry, the Na chiefdom must have already existed during the mid-first century CE. The location where the seal was found as well as the geographical descriptions of the *Gishi-Wajinden* connect it to the area of Fukuoka city.

In the following the *Gishi-Wajinden* gives a list of place names that formed the Wa chiefdoms during the third century CE. According to the text there are thirty chiefdoms, but it only records 28 distinct names for chiefdoms under Wa control and in addition the hostile chiefdom Kona. Since the chiefdom of Na is mentioned twice, it is not clear whether there were two separate chiefdoms of that name, or whether this is the same one.

Place names	LHC (Schuessler 2009)	Seyock 2004	Wedemeyer 1930	Kidder 2007
對馬	*tuəs-ma	Tuei-hai	Tuima	Tsushima
一大 一支	*ʔit-das *ʔit-kie	Ita	Ikki	“large chieftdom” (Iki)
末廬	*mat-lɔ	Mo-lu	Matsuro	Matsura
伊都	*ʔi-tɔ	I-tu	Ito	Ito
奴	*na	Nu	Nu	Na
不彌	*pu-mie	Pu-mi	Fumi	Fumi
投馬	*do-ma	T'ou-ma	Touma	Toma
邪馬壹	*ja-ma-ʔit	Hsieh-ma-i	Yamadai	Yamaichi
斯馬	*sie-ma	Szu-ma	Shima	Shima
已百支	*kiə-pak-kie	Szu-pai-chi	Ipokki	Ihaki
伊邪	*ʔi-ja	I-hsieh	Iza	Iya
都支	*tɔ-kie	Tu-chih	Gusshi	Toki
彌奴	*mie-nɔ	Mi-nu	Minu	Mina
好古都	*hou-kɔ-tɔ	Hao-ku-tu	Kassetto	Kokoto
不呼	*pu-hɔ	Pu-hu	Fuku	Fuko
姐奴	*tsia-nɔ	Chieh-nu	Shanu	Sona
對蘇	*tuəs-sɔ	Tui-su	Tuiso	Tsuso
蘇奴	*sɔ-nɔ	Su-nu	Sonu	Sona
呼邑	*hɔ-ʔip	Hu-i	Koyi	Ko-o
華奴蘇奴	*yua-nɔ-sɔ-nɔ	Hua-nu-su-nu	Kenusonnu	Kanasona
鬼	*kui	Kuei	Ki	Ki
爲吾	*wai-ŋɔ	Wei-wu	Wigo	Igo
鬼奴	*kui-nɔ	Kuei-nu	Kinu	Kina
邪馬	*ja-ma	Hsieh-ma	Yama	Yama
躬臣	*kuŋ-gin	Kung-ch'en	Kusshin	Kuji
巴利	*pa-li	Pa-li	Hari	Hari
支惟	*kie-wi	Chih-wei	Kiwi	Kii
烏奴	*ʔɔ-nɔ	Niao-nu	Wunu	Una
奴	*na	Nu	Nu	Na
狗奴	*ko-nɔ	Kou-nu	Kunu	Kona

Table 18: Pre-Old Japanese toponym corpus from the *Gishi-Wajinden* with LHC readings and pseudo-modern Japanese transliterations.

The reconstructions based on the LHC readings of the graphs in the *Gishi-Wajinden* will be carried out in the next part. I will follow the pseudo-modern Japanese transliterations of Kidder (2007) when referring to the lexemes from the *Gishi-Wajinden*. The transliterations from Wedemeyer (1930) and Seyock (2004) are provided here only to offer some alternative transcription practices, because there is no generally agreed way to transcribe the forms in modern Japanese

as of yet. The reader may thus be able to better understand the possible modern Japanese equivalents of the language material. There are also several titles of officials from some of the recorded chiefdoms.

Title	LHC (Schuessler 2009)	Function
卑彌呼	*pie-mie-hɔ	Queen (Yamatai)
卑彌弓呼	*pie-mie-kuŋ-hɔ	King (Kona)
卑狗	*pie-ko	First official (Tsushima, Iki)
卑奴母離	*pie-nɔ-mə-liai	Second official (Tsushima, Iki, Na, Fumi)
爾支	*ne-kie	First official (Ito)
泄謨觚	*siat-mɔ-kuɔ	Second official (Ito)
柄渠觚	*piaŋ-gia-kuɔ	Third official (Ito)
咒馬觚	*zi-ma-kuɔ	First official (Na)
多模	*ta-mɔ	First official (Fumi)
彌彌	*mie-mie	First official (Toma)
彌彌那利	*mie-mie-na-li	Second official (Toma)
伊支馬	*ʔi-kie-ma	First official (Yamatai)
彌馬升	*mie-ma-siŋ	Second official (Yamatai)
彌馬獲支	*mie-ma-yuak-kie	Third official (Yamatai)
奴佳鞮	*nɔ-kɛ-de	Fourth official (Yamatai)
狗古智卑狗	*ko-kɔ-tɕe-pie-ko	First official (Kona)

Table 19: Pre-Old Japanese official titles from the *Gishi-Wajinden*

In addition to the place names and official titles, there are also some personal names of Wa officials mentioned in the Chinese records and finally some very few other possible Wa words.

Name	LHC (Schuessler 2009)	Note
難升米	*nan-siŋ-mei	Grand Master of the Wa who visited the Chinese court in 238 CE
都市牛利	*tɔ-dziɔ-ŋu-li	Subordinate to the Grand Master above
伊聲耆掖邪狗	*ʔi-sɛŋ-gi *jak-ja-ko	Grand Master of the Wa who visited the Chinese court in 243 CE
載斯 烏越	*tsə-sie *ʔɔ-wat	Grand Master of the Wa who visited the Chinese Daifang Commandery in 247 CE
壹與	*ʔit-ja	13-year old female relative who became queen after

Table 20: Personal names from the *Gishi-Wajinden*

Other mentions are the name of the Japanese polity during that time, which may be considered as Pre-Old Japonic, but it could also simply be the Chinese term used at that time: 倭 LHC *ʔuɔi. The last Japonic lexeme is 噫 LHC *ʔi, which is the word the Wa use when humbly talking to aristocrats and means something like “yes.”

Part 4: Analysis

In this section I will analyze the lexical material from the Pre-Old Japanese corpus. This includes reconstructing the possible Pre-Old Japanese readings of the Chinese characters from the *Gishi-Wajinden* and providing etymologies or connecting the lexemes to Old Japanese or Modern Japanese. After the discussion of the relevant lexemes, I will then try to answer the question on the split of the Japonic languages. More specifically, I will analyze whether the split probably happened before or after the Pre-Old Japanese language corpus was recorded.

In regard to the early language forms, I will often use pseudo Modern Japanese transliterations of the Chinese characters as they are used in most secondary literature (for example /p/ will be transcribed as /h/ in line with the historical sound change $p > h$). This is for the sake of simplicity and should not be confused with reconstructions based on the Chinese graphs, which are always preceded by an asterisk (*). In the case that Chinese characters have no common transcription, I will simply use the Chinese characters from the original source to refer to the lexical items.

4.1 Toponyms

The study of the toponyms recorded in the *Gishi-Wajinden* is useful for understanding the practice of transcription by Chinese scribes, because in some cases the modern Japanese equivalents of the place names still exist. Therefore, we know how the toponyms that were recorded in the *Gishi-Wajinden* have developed into modern Japanese. I will list the toponyms that can be connected to modern Japanese place or area names through the geographical explanations in the *Gishi-Wajinden*.

4.1.1 Northern Kyūshū (Tsushima, Iki, Matsuro, Ito)

Four place names from the *Gishi-Wajinden* have been connected to places in northern Kyūshū and surrounding islands, which are located south of the Korea Strait that connects Korea and Japan. The Chinese transcriptions can be connected to Modern Japanese spellings, which then

gives a clue as to how the transcription practice by the Chinese scribes in the third century looked like. In the following I will investigate these toponyms.

The first names that were recorded for the Wa territory are that of the islands 對馬 *tuəs-ma and 一支 *ʔit-kie (in the original as written 一大, but commonly agreed to be a transcription error (Miyake 2003:111, note 33)). As there are only two major islands between Korea and Japan, the two islands mentioned in the *Gishi-Wajinden* can be connected to those two islands. The modern Japanese transcriptions of the islands are Tsushima 対馬 and Iki island 壱岐島.

There is no known etymology for Iki island, but it is transcribed as OJ *ikyī*. Tsushima can be analyzed as two separate lexemes: OJ *tu* ‘port, harbor’ and *sima* ‘island’. The name of the island can thus be interpreted to mean ‘port-island’. This is also suggested by the entries of the *Gishi-Wajinden*, which states that the islanders frequently trade with the surrounding areas.

There is also another OJ word for ‘port, harbor,’ which is MdJ *minato*. This can further be segmented into the lexemes *mi* ‘water,’ *na* ‘Genitive-marker’ and *to* ‘gate’. In *Man’yōshū* volume 7, poem 1288 (MYS 7.1288) it is written as *minato* 水門. It contains an early lexicalized form of the OJ Genitive marker *-no*.

The next recorded place is the first one on the Japanese mainland and written as LHC 末廬 *mat-lɔ. It has been connected with the region Matsuura as seen in the names of Matsuura River 松浦川 and Matsuura Shrine 松浦宮 (seen for example in “The Tale of the Matsuura Shrine” 松浦宮物語 from the early Kamakura period (1185-1333)).

Alexander Vovin reconstructs for OJ a contracted form OJ *matura* in MYS 15.3685. This is also likely, considering the Pre-Old Japanese transcription of 末廬 *mat-lɔ does not transcribe a medial vowel. This transcription would not be expected if the underlying Japonic word was *matu-ura.

The poem mentions a ‘Lady Tarasi,’ which is thought to refer to *Jingū-kōgō* “Empress consort Jingū” 神功皇后 (trad. r. 201–269 CE). Vovin interprets the line in the MYS about *matura as wordplay on OJ *mat-u* ‘to wait’ which “are complete homophones with common accent pattern

LOW-HIGH” (Vovin 2009:134). The modern Japanese pronunciation of 松浦 as Matsuura might then be a new reading based on the Chinese characters.

The toponym 伊都 *ʔi-tɔ was interpreted as OJ *itwo* ‘thread’ by John Bentley (2008:15). According to the geographical information in the *Gishi-Wajinden*, it can be connected with the area of the peninsula of Itoshima 糸島 in Fukuoka Prefecture on the northern coast of Kyūshū. The *Gishi-Wajinden* also states that the Wa plant mulberry trees for silkworms and “spin fine threads for linen, silk, and cotton fabrics” (Kidder 2007:15). As for the chiefdom of Ito, it is stated:

The chiefdoms have markets for trading, though not without a controlling high Wa representative. North of the queen’s domain is a particular place from which a high official conducts inspection of all the chiefdoms. For this reason all the chiefdoms are always in fear and terror. He governs from the chiefdom of Ito, and throughout the domain he is like a Chinese magistrate. When the ruler dispatches envoys to visit the capital and when the Daifang commandery or the envoys of the various Han polities arrive at the Wa domain, all at the port must open everything to be examined, then [be]escorted on so that messages and gifts sent to the queen reach her in an orderly way. (Kidder 2007:16)

From this it is clear that Ito had considerable power over internal and external trade. A hereditary king was governing in Ito, but he was obedient to the queen. Barbara Seyock has identified Ito with the historical burial site of Hirabaru in the vicinity of the city of present-day Maebaru 前原 (Seyock 2003). To sum up, these were the place names that have modern Japanese equivalents and can also be known for OJ.

GWJ	LHC	OJ	ModJ
對馬	*tuəs-ma	<i>tusima</i> ‘port-island’	Tsushima
一支	*ʔit-kie	<i>iki</i>	Iki
末廬	*mat-lɔ	<i>matura</i> ‘pine-bay’	Matsuura
伊都	*ʔi-tɔ	<i>itwo</i> ‘thread’	Itoshima

Table 21: Toponyms from the area of northern Kyūshū

It is apparent that not all expected medial vowels were transcribed by the Chinese scribes, as seen in *tuəs-ma and *mat-lɔ. It may also be possible that they generally did not transcribe a certain vowel sound, for example central vowel such as *ə or *i. However, in the case of *mat-lɔ we

already know that it refers to OJ *u. In the case of *tuəs-ma the “hidden” vowel is also suggested by another toponym. One of the place names that were not described in detail by the *Gishi-Wajinden* and only provided as a list of toponyms is *sie-ma 斯馬. Based on the itinerary of the *Gishi-Wajinden* it can be expected that the Chinese scribes did not visit all the chiefdoms. The places that were only listed but never visited were probably elicited from the native population or some Wa officials. Therefore, there may be some inaccuracies in the transcriptions. The toponym LHC *sie-ma 斯馬 may simple refer to OJ *sima* ‘island,’ just as the toponym LHC *ja-ma 邪馬 may simple be OJ *yama* ‘mountain, forest’. Under the assumption, that these two toponyms are merely general geographical designations, the vowel of *tuəs-ma can be reconstructed by applying the transcription of *sie-ma. Therefore, we would expect a (likely high) front vowel, which would suggest *tu-sima (Note that Bentley reconstructs *sema ‘island’ for 斯馬). Note that if the interpretation of 對馬 *tuəs-ma as *tu-sima ‘port-island’ is correct, the Chinese scribes did not understand the underlying etymologies of the name they were transcribing and did not try to recover the two lexemes *tu and *sima in their transcription. They rather seemed to have focused on transcribing the actual sound they were hearing.

The vowel sequence *Cie in the Chinese transcriptions will be examined in more detail further below, because it is very important for the question whether vowel raising had already happened in Pre-Old Japanese of the third century CE.

It is interesting that for the first syllable in *ʔit-kie and *ʔi-tɔ, both of which relate to OJ *i*, different graphs were used for transcription. This may suggest that graphs were chosen in relation to the onset of the following syllables, or that different scribes were writing down these words by using whatever graph they deemed appropriate at the time of transcribing.

Nevertheless, I think that this shows that there were no set rules on how to transcribe foreign words and we may not be successful in establishing direct correspondences in Japonic sounds and Chinese character transcriptions. Rather, there could be more than one possible interpretation for each sequence, which makes reconstructing the Pre-Old Japanese pronunciations even more challenging.



Figure 11: Historical map of northern Kyūshū (adapted from Nippon Gakujutsu Shinkōkai 1965:lxii–lxiii)

4.1.2 Other toponyms (Na, Fumi and Toma)

The toponym 奴 *na has to be connected to the Na Gold Seal dated to 57 CE. Therefore, the graphs transcription may be anachronistic and need not record a current Pre-Old Japanese pronunciation. Marc Miyake points out that there were additional deliberations of Chinese scribes when transcribing foreign words:

Complicating matters further is the Chinese usage of phonograms with derogatory meanings to write foreign (i.e., ‘barbarian’) names: e.g., 邪 “evil”, 奴 “slave”, 卑 “humble”, 狗 “dog” for POJ in *Wei zhi*. These graphs may have been chosen principally for their negative connotations and only secondarily for their readings’ phonetic resemblance to foreign syllables. (Miyake 2003:106)

He suggests that scribes may have chosen derogatory graphs despite their inexact phonetic match over phonetically accurate readings of the characters. Therefore, whenever derogatory graphs were used in transcriptions, one needs to be especially careful when interpreting its transcription. The

graph 奴 “slave” is such a case and thus 奴 *na may not only refer to a transcription from two hundred years before the Pre-Old Japanese corpus, but could also be inaccurate in its transcription. It is also likely that the Chinese were familiar with the fact that this character has earlier been used for transcribing the Wa chieftom and therefore applied it again, even though the spelling may not have resembled the Pre-Old Japanese pronunciation.

Nevertheless, 奴 *na has been connected to the modern Japanese word *nwo* 野 ‘field’ (cf. LHC *ʔno : OJ *wonwo* ‘small field’ 小野 (Bentley 2008:28)). Other possible connections based on 奴 *na are OJ *na* ‘name,’ OJ *na* ‘fish,’ and OJ *na* ‘land, earth’ (Bentley 2008:15).

The interpretation as ‘field’ may also be interpreted to mean ‘peripheral region’ in a more abstract sense, as the rice fields were usually found in the level plains, while fortifications, such as the most important excavation site for the Yayoi period (until 300 CE) in Yoshinogari shows, were found in more mountainous terrain. The *Gishi-Wajinden* does refer to the Na chieftom as the place where the Wa lands end, so the interpretation as ‘peripheral region’ may explain the name even better. This could then also be connected to the Kona chieftom (see further below) in the south of the Queen’s lands.

According to the *Gishi-Wajinden* 不彌 *pu-mie lies east of Na, but no known place name has been connected to it yet. There is also no etymology known for this toponym. Bentley suggests ‘spot, design’ based on the Ryūkyūan variety of Ishigaki *fumi*, which he derives from Proto-Ryūkyūan *pume (Bentley 2008:29).

Another populated place was 投馬 *do-ma, but it could not yet be connected to any area in Japan. As for the meaning, John Bentley entertains the possibility of a connection with the region of present-day Satsuma in southern Kyushu and provides the etymology *tōma ‘sweet potato’ (Bentley 2008:28-29). Indeed, the area of southern Kyushu is known for its production of *satsuma imo* ‘sweet potato’ (MdJ *imo* ‘potato’). According to the *Gishi-Wajinden*, this is the second-most populated chieftom after Yamaichi, and it can be reached by ship. In my opinion it can therefore be interpreted to simply mean *tu-ma ‘port-place’ (more on *ma ‘place’ in section 4.3.5), as it must have been an important port city for national and international trade.

4.1.3 Yamatai or Yamaichi

Among the remaining toponyms, the most discussed is the Wa capital of the third century CE. The common reading in contemporary literature of the queen’s capital as Yamatai is based on the assumption that the transcription 邪馬壹國 in the *Gishi-Wajinden* is an error, and the correct spelling should be 邪馬臺國. This spelling is found in the Chinese chronicle *Hou Hanshu* (compiled around 445 CE). However, in the *Gishi-Wajinden*, the character 壹 is used 86 times, and 臺 56 times and both characters are never used incorrectly (Bei Songzhi, cited in Kidder 2007:234). The original reading of the capital’s name should therefore be gathered from the graphs used in the *Gishi-Wajinden*, which are 邪馬壹 LHC *ja-ma-ʔit.

4.1.4 Yamaichi 邪馬壹

Yamaichi can be analyzed as the two modern Japanese lexemes *yama* and *ichi*. The first lexeme is cognate with MdJ *yama* 山 ‘mountain,’ but probably had a broader meaning in Pre-Old Japanese (cf. Proto-Sakishima (southern Ryūkyūan) *yama* ‘forest’ (Bentley 2008b:300)). It is possible that it simply refers to a place with mountains or wood-land (MdJ has many place names like that, e.g. Yama-nashi, Yama-guchi, Yama-gata). For the second lexeme, one possibility is *ichi* 一 ‘one,’ resulting in the compound ‘mountain-one,’ which might have simply meant ‘capital.’ However, this analysis needs to be rejected, because the modern Japanese numeral *ichi* ‘one’ is Sino-Japanese and was introduced into Japanese relatively late. The OJ word for ‘one’ is *pito*, which is still used in MdJ (after the sound change $p > f > h$) in words such as *bito-tsu* 一ツ ‘one (piece)’. I therefore analyze the second lexeme 壹 as OJ *iti* > MdJ *ichi* 市 ‘marketplace,’ which would make the compound OJ *yama-iti* 山市 ‘mountain-market’. The importance of trade during this time is apparent in the *Gishi-Wajinden*, for example in Tsushima chiefdom between Kyūshū and the Korean peninsula: “They travel by boat to buy grain in markets to the north and south” (Kidder 2007:12). This is also confirmed by archaeological data, which points to “substantial trade along this west side of Japan beginning in Early Jōmon centuries” (Kidder 2007:47).

4.1.5 Yamato 邪馬臺

After the *Gishi-Wajinden* from the mid-third century CE, there is no mention of the Japanese islands in Chinese books for more than one hundred years, suggesting that contact between the Chinese mainland and the Japanese islands was abandoned. When the contact was re-established in the 5th century CE, all the Wa chiefdoms have already been unified and the new capital was now called Yamato ‘Great Wa’ 大和 in the Kinai area. According to Seyock, a footnote in the *Hou Hanshu* states that the reading of the name of the capital has been changed (Seyock 2004:141). Yamato may be analyzed as the lexemes *OJ yama* 山 ‘mountain, forest’ and *OJ to* ‘gate’. The second element we already encountered above in *OJ minato* ‘port, harbor’ and it can also be connected with the modern Japanese *to* 都 ‘capital,’ which is used in the name of the former Japanese capital Kyōto 京都 in the former Yamato area.

I want to argue that with queen Himiko’s death in the mid-third century CE, contact with the Chinese kingdom of Wei was interrupted and only restored after years of power struggle in the Japanese islands. After the Yamato clan had secured power and moved the capital to the Kinai area, the name was changed in subsequent Chinese chronicles and from now on was Yamato. In the third century however, the capital was in another location and was referred to as Yamaichi.

4.1.6 Kona 狗奴

To the south of the queen’s domains there was a kingdom known as 狗奴 *konɔ in the *Gishi-Wajinden*. Researchers generally agree that the kingdom of *konɔ refers to the Kumaso people (consisting of the Kuma tribe and the So tribe) of southern Kyūshū (Bentley 2008:30, Matsumoto 1971:29–32).

The description of the *Gishi-Wajinden* strongly suggests such a connection, as the Kumaso 熊襲 (in later works referred to as Hayato 隼人) is the only hostile enemy on the Japanese archipelago that is mentioned to have existed south of the Wa territory. The territory of the Kumaso people is found in the southern part of Kyūshū. The Kuma tribe is to the south-west and the So tribe to the south-east and can be located through burial sites specific to those groups (Nagayama

2009:9,12–15; Nakamura 1996:114; Ōbayashi 1975:122–123). Their former territory corresponds to Kuma district 球磨郡 in the south-east of Kumamoto prefecture and Soo district 曾於郡 in the Shibushi bay area east of Kagoshima prefecture. This view is also shared by the Japanese linguist Shichirō Hattori, who suggests that 狗奴 might be read as MdJ *kuma* くま, and thus also relates it to the Kumaso tribe (1987:132).

There are, however, two problems with the theory that *konɔ refers to Kuma, in particular the discrepancy in the vowels of the word and the medial nasal. As for the nasal, *konɔ may be a misheard transcription for *komɔ. In contrast to all the other place names in the *Gisbi-Wajinden*, the kingdom of *konɔ was known to the scribes of Wei only through second hand, as they did not visit *konɔ and must have relied on Wa officials when they recorded this place name. Therefore, I assume that the correct reading of the name should be Pre-Old Japanese *komɔ (> OJ *kuma*). The vowel change ɔ > a is analogous to Pre-Old Japanese *mat-rɔ 末廬 > MdJ Matura 松浦. The vowel change from *o in the 3rd century Pre-Old Japanese to the 8th century *u is explained by the vowel change o > u in OJ (see Vovin 2011:223).

Another explanation involves interpreting *konɔ as two lexemes *ko and *nɔ. The latter can be explained analogous to 奴 *na (see above). Pre-Old Japanese *ko > OJ *ku* may be found in words such as OJ *kuro*- ‘black,’ OJ *kuma* ‘bear,’ OJ *kusar*- ‘to rot,’ OJ *kumatwo* ‘dark corner,’ OJ *kurwo* ‘black person,’ OJ *kuswo* ‘shit,’ for example (see also Janhunen 2003:1, note 3). Therefore, it could be a derogatory prefix that was used for describing foreigners or undesirable people. This also fits neatly with the fact that the Kumaso people were renamed to Hayato by the Yamato court after their surrender and given positions in the imperial guards, which suggests that Kumaso had a bad connotation.

If this interpretation is correct, the second lexeme can be *ma ‘place,’ so that ku-ma would be parallel to ya-ma and si-ma. The name could simply be ‘place of ku’ (whatever ku might have meant). This would then also be an important interpretation when dealing with the title of the Kona kings.

4.2 General observations of the Chinese transcription practices

There are several reasons to believe that Chinese scribes were trying to faithfully record the sounds that they were hearing, although they tended to sometimes chose derogatory graphs that did not fully fit the transcriptions well. This can be seen very well in the Japonic word *sima ‘island,’ which may have been transcribed up to four times in the Pre-Old Japanese corpus of the third century *Gishi-Wajinden*. I will now provide the lexemes that could all include the word for island.

We have already seen the name for the islands between the Korean and Japanese coasts, 對馬 *tuəs-ma, which I reconstructed as Pre-Old Japanese *tusima (modern Japanese *Tsushima*). It is noticeable that the vowel of the second syllable of a three-syllable word was not transcribed by the Chinese scribes. This can also be seen in the word 末廬 *mat-lɔ, which was connected to Old Japanese *matura*. If my reconstructions are correct, then at least high vowels in the second syllable of a three-syllable word were not transcribed by the Chinese scribes. This leads to the question as to why that was the case.

One possible explanation is the accent pattern of three-syllable words in Japanese. It may be possible that the second syllable was not pronounced as prominently as the other syllables and thus the scribes did not see the need to transcribe the vowel. This could mean that trisyllabic accent may have been L in second position. If this was the case, this would point to the fact that the Chinese scribes were trying to faithfully transcribe the sounds they were hearing and practiced a relatively genuine transcription when transcribing foreign words. See the table below for the different accent groups that are reconstructed for Proto-Japonic. The letter in brackets shows the accent pattern on the particle following the noun.

	Myōgishō	Hyōgo	Tokyo	Akita	Ōita
3.1	HHH(H)	HHH(H)	LHH(H)	LHH(H)	LHH(H)
3.2	HHL(L)	LHL(L)			
3.3	HLL(L)	HLL(L)	LHL(L)	LHL(L)	LHH(L)
3.4	LLL(H)	LHL(L)	LHH(L)	LHH(L)	LHL(L)
3.5	LLH(L)	HLL(L)	LHL(L)	LHL(L)	LHL(L)
3.6	LHH(H)	LHH(H)	LHH(H)		HLL(L)
3.7	LHL(L)	LHL(L)	HLL(L)/ LHH(H)		

Table 22: Accent of three-mora nouns (from Shimabukuro 2007:54)

Other examples that may record the word for island are the toponym 斯馬 *sie-ma and two titles. The first official of the Na chiefdom is titled 児馬觚 *zi-ma-kuɔ and the second official of Ito is titled 泄謨觚 *siat-mɔ-kuɔ. Assuming that 觚 *kuɔ denotes the title, the preceding graphs could be an explanation as to what exactly the official was doing. Given that both Na and Ito were chiefdoms at the northern coast of the Japanese islands, I would interpret both titles as ‘island-official,’ meaning that they were in charge of looking after the outlying islands of the chiefdoms.

If this is correct, there are several observations that can be made. The Chinese scribes seemed not to have picked up on the fact that both official titles were the same and used different graphs for transcribing it. It is also possible that different scribes were writing down these titles and perceived the sound of Japonic differently. This points to the fact that the scribes were trying to faithfully transcribe the sounds they were hearing from the native population, but that they were not able to understand or analyze the underlying language themselves. Therefore, the Chinese graphs could be used as a phonological representation of the Japonic language during the third century CE. However, given the different transcriptions of the same word, there is also a great deal of flexibility in interpreting these transcriptions. The vowel qualities are not exact and also voicing may have not always been transcribed correctly by the scribes.

4.3 Titles

In this section I will examine the titles that were recorded in the *Gishi-Wajinden*. I will use information on the nature of the transcription practices of Chinese scribes from the section above and apply that to interpreting the titles.

4.3.1 Himiko 卑彌呼 and Himikuko 卑彌弓呼

Miyake transcribes the title of the queen 卑彌呼 LHC *pie-mie-ho as *pi-me-? (Miyake 2003:114). Opposed to this, Bentley transcribes it as Pre-Old Japanese *pe-me-ho (Bentley 2008:19). I will now look at all three syllables individually and discuss possible etymologies for them. The title for the king of the *Kona* kingdom is very similar and differs only in one character: 卑彌弓呼 *pie-mie-kuŋ-ho.

4.3.1.1 *pie 卑

A common interpretation of this graph is OJ *pi* ‘sun,’ which would also fit well with the religious view prevalent in Japanese during that time known from the Old Japanese corpus of the heavenly descent from the sun deity *Amaterasu*. Based on Ryūkyūan data, John Bentley interprets 卑 LHC *pie as *pe and thus rejects the interpretation as *pi based on the fact that it should be reconstructed as PJ *pi ‘sun’ and not *pe. He suggests a loan from Paekche *pye ‘west’ for Pre-Old Japanese *pe (Bentley 2008:18). For a more detailed discussion of this see Miyake (2003:114–115). Even though Miyake agrees that 卑 implies Pre-Old Japanese *pe and Ryūkyūan data points to *pi ‘sun,’ he still offers two solutions to this problem:

First, the PJ word for “sun” was *pi and the transcription 卑 LHan *pie is inaccurate because (1) the Chinese misheard a foreign *i as *ie and/or (2) the Chinese deliberately chose the derogatory graph 卑 meaning “humble” in spite of an inexact phonetic match.

Second, the third century Japonic word for “sun” was *pe and the vowel later rose to *i (even in PR!), leaving no trace of its earlier midness anywhere in later Japonic. (Miyake 2003:115)

Miyake thus thinks that 卑 is an inaccurate transcription of Pre-Old Japanese *pi ‘sun’. This is also suggested by a few entries in the *Man’yōshū*, where a name referring to an emperor/empress

or imperial prince is mentioned. This phrase is thought to show succession from the Sun Deity Amaterasu (Vovin 2017:122):

高照日之皇子⁸

Taka-terasu pi no mi-kwo

‘High-shining sun-prince / child of the sun (Vovin 2017:121, 130)

According to Vovin, most of the examples for *taka ter-as-u pi-no mikwo* ‘the high-shining sun-prince’ “also point to Emperor as a successor of the Sun Deity Amaterasu” (Vovin 2017:122).

Another interpretation relies on ancient Japonic language data from the Korean peninsula. Christopher Beckwith reconstructs the following lexemes for the stage he calls Old Koguryō (OKog) (he uses [☆] instead of * for reconstructions based on Chinese character readings):

OKog *piy : [☆]piy [不] ~ [☆]mbiy ~ [☆]miy [未] ‘country, nation (國)’ ~ [☆]piy [非] ‘commandery (部)’
~ *piy [非] ‘Puyo [夫餘], name of a kingdom, people, and language closely related to Koguryō’.
(Beckwith 2004:135)

For 卑 he reconstructs the Pre-Old Japanese root *pi ~ *bi ‘country’ (MdJ *hina* ‘countryside; remote place’). He sees this reflected in the *Gishi-Wajinden* entry of 卑奴母離 *pie-nō-mə-liai, which for him occur in MdJ *hinamori* ‘frontier guard’ (< AJpn (Ancient Japanese) [☆]pinâməwri in his transcription). 奴 *nō is thought to be the genitive-attributive marker OJ *-no*. I will return to this title in section 4.3.2 in more detail. The lexeme *pi ~ *bi ‘country’ also appears in another word from the Japonic toponym corpus:

The OKog word occurs in the name of the early capital city, [...] OKog *piyna : [☆]piynəy [不耐] ‘domestic, national (國內; lit., inside the country)’. This seems to be directly cognate to OJpn [☆]pina [比那] ‘frontier region, countryside.’ (Beckwith 2004:135)

In my opinion, the interpretation offered by Beckwith semantically fits the title very well. Given the religious importance of the sun, both *pi ‘sun’ and *pi ‘country’ may even be considered as cognates. It should be noted though that the Old Koguryō lexemes from Beckwith would have been recorded about 500 years after the Pre-Old Japanese corpus.

⁸ Written 日之御子 once (MYS 2.162) and 日之皇子 7 times (MYS 1.45, 1.50, 1.52, 2.162, 2.167, 13.3234), one of which reads: 皇子 高光 日之皇子 *taka-pikaru pi no mi-kwo* (MYS 2.204)

4.3.1.2 *mie 彌

The syllable *mie is often analyzed as the honorific prefix *me > mi 御. Bentley argues that *me rather than *mi is confirmed by Ryūkyū evidence, where *me > mi (cf. *meya > *miya* ‘palace’ in Ishigaki), but in many dialects we have *mi > N (Bentley 2008:19–20; Bentley 2008b:29). Considering these examples, the word as a noun might have simply meant something like ‘royal,’ which later developed into the honorific prefix *mi*.

Another possibility for 彌 *mie is to relate it with the Korean word *mu* 巫 (巫) ‘shaman,’ which could also be represented in the MdJ word *miko* 巫女 ‘shrine maiden’. However, since the title of the male king of Kona, the hostile kingdom in the south of the queen’s lands also includes *mie 彌, this is unlikely. Interpreting 彌 *mie as a prefix also suggests that the title of the queen consists of the two words *pie and *mie-ho.

Another possibility stems from a name of an old Japanese sea god called OJ *pata-tu-mi* (MdJ *Watatsumi*). It can be analyzed as the noun *pata* ‘sea,’ the old genitive marker *tu* and *mi*, which should be interpreted as meaning ‘god.’ However, Modern Japanese has other words for this god’s name. The word for ‘sea’ is MdJ *umi*, the genitive marker is *no* and the word for god is *kami*. The newer genitive marker *no* seems to have already been present during the third century corpus of Pre-Old Japanese, as seen through the titles *pi-na-mori, but both markers were still used during Old Japanese. It could be that *mi* and *kami* ‘god’ are semantically similar. Therefore, the graph denoting *mi in the Pre-Old Japanese titles may also be interpreted to mean something related to ‘god.’

There are two more titles that prominently feature the graph for *mi. These are the first and second official of the Toma chiefdom, which are 彌彌 *mie-mie and 彌彌那利 *mie-mie-na-li respectively. The first part of the word has often been identified as MdJ *mimi* ‘ear’ (< OJ *myimyi*), which Bentley interprets to mean ‘a judge, one who hears complaints’ (Bentley 2008:19). There are two interpretations for 那利 *na-li. Beckwith cites Kōno for the Han-Paekche word 那利 *nari ‘river’ (Beckwith 2004:15, note 15). So, it may have been an official title in some way related to irrigation of rice paddies.

Another possibility is that this can be connected to the Middle Japanese copula *nari* (c.f. Bentley 2008:25) and may have simply been a mistake in the transcription by the Chinese scribes, who transcribed the Japanese title with the following copula as it they were told by the Japanese official speaking Japonic. In that case, both officials may be considered to have been *mimi, or it could also be that there was only one official in Tuma.

4.3.1.3 *ha>hɔ 呼

This character has been very difficult to interpret by researchers for many reasons. After thorough analysis, Marc Miyake concludes that “I have no idea what 呼 LHan *ha > hɔ might represent” Miyake (2003:116).

Considering that LHC *pie-mie-ha refers to the queen of the thirty Wa chiefdoms and for the other chiefdoms there are also several official titles recorded, it seems plausible that *pie-mie-ha is also the title of a ruler.

The consonant of the graph 呼 *ha>hɔ is very challenging to interpret, because it is thought that neither OJ nor Proto-Japonic had the fricative /h/. It is also unlikely that it is a transcriptional error, because this graph is used in two titles (卑彌呼 *pie-mie-hɔ (queen of Wa), 卑彌弓呼 *pie-mie-kuŋ-hɔ King (king of Kona)) and two toponyms (不呼 *pu-hɔ, 呼邑 *hɔ-ʔip). Additionally, there are other graphs with a fricative as initial consonant: 好 LHC *hou, 獲 LHC *ɣuak, 華 LHC *ɣua.

There are different ways of how to deal with this issue. One possibility is that there was a fricative in Pre-Old Japanese. However, it seems unlikely that such a fricative can be reconstructed for Proto-Japonic, as there are no traces in OJ (does not have /h/) or any Ryūkyūan variety. A fricative /h/ in modern varieties developed from either /p/ or possibly /k/ (see Table 23).

	Proto-Sakishima	Hirara	Tarama	Ishigaki	Hateruma	Hatoma	Yonaguni
‘black’	*kuru	<i>ffu</i>	<i>ffu</i>	<i>Fufu</i>	<i>fufu</i>	<i>bufu</i>	<i>buru-iru</i>
‘child’	*kura	<i>ffa:</i>	<i>ffa:</i>	<i>fa:, fa:ma</i>	<i>fa:</i>	<i>fufa</i>	<i>ba</i>
‘cloud’ ⁹	*kumo	<i>fumu</i>	<i>fumu</i>	<i>Fumu</i>	<i>fumoy</i>	<i>humu</i>	<i>Nmu</i>
‘comb’	*kusi	<i>fusi</i>	<i>fusi</i>	<i>Fusi</i>	<i>futsi</i>	<i>busi</i>	<i>kuci</i>
‘dark’	*kura-	<i>ffa^hka^hi</i>	<i>ffa^hsa:l</i>	<i>fufasa:ŋ</i>	<i>fabaŋ</i>	<i>bufaŋ</i>	<i>dwaŋ</i>
‘eat’	*kura-	<i>fo:</i>	<i>fu:</i>	<i>fo:ŋ</i>	<i>foŋ</i>	<i>bu:ŋ</i>	<i>buŋ</i>
‘medicine’ ¹⁰	*kusuri	<i>fusu^hi</i>	<i>fuful</i>	<i>Fusiri</i>	<i>fut^hfiri</i>	<i>bufiri</i>	<i>ccuri</i>
‘mouth’	*kuti	<i>futsi</i>	<i>futsi</i>	<i>Futsi</i>	<i>futsi</i>	<i>butsi</i>	<i>t^hi:</i>

Table 23: Data from southern Ryūkyū dialects where reconstructed initial *ku is not found in any dialect (data from Bentley 2008:247, 251, 252, 253, 257, 273, 274).

Nevertheless, John Bentley tentatively reconstructs *h for the stage of Pre-Old Japonic: “I believe that *h_o originally meant ‘heir’, but later lenited to *wo and at some later date was then analyzed as a male heir, and then finally only as a male” (Bentley 2008:20). It should be pointed out here that there is no language data from OJ, MdJ or Ryūkyūan to account for *h_o ‘heir’ and this reconstruction may therefore be questioned.

Another solution may be that the scribes were trying to transcribe a sound that was not in their own sound inventory. However, if that was the case that assumption does not lead further in establishing what Japonic sound could they have wanted to transcribe with *h without being able to transcribe it otherwise. It is also possible that this is an anachronistic use of the character, because it may have already been used in earlier works that the scribes knew. We would need to find old manuscripts that use the same graph in a similar manner to verify this, which is highly unlikely.

The reconstruction of the LHC pronunciation could also be faulty. We may consider that it could have already been closer to the later MC pronunciations, which Schuessler gives as 呼 MC *xuo and 好 MC *xâu. Considering also the modern Japanese Sino-Japanese readings of the characters as 呼 *ko* and 好 *kō*, these graphs may have been used to transcribe some sort of velar quality.

⁹ OJ *kumo*, Koniya *k^humu*, Yoron *kumu*, Okinawa *k^humu:*, Ōgami *fumu*, Ishigaki *φumu*, Hateruma *φumoy*, PR *kumo (Pellard 2013:88)

¹⁰ OJ *kusuri*, Yuwan *k^husuri*, Koniya *kusur*, Okinawa *k^husui*, Ōgami *ffuw*, Ishigaki *φu^hei*, Yonaguni *ut^hei*, PR *kusori (Pellard 2013:86)

It is still unlikely that we should interpret 呼 LHC *hɔ as *kɔ, because there were graphs for transcribing *k in the *Gishi-Wajinden*, which the scribes should have then used.

Gina Barnes assumes that the ruling cult of queen Himiko is heavily related to the Chinese mainland. She does this by locating deity beast mirrors of continental origin that are said to have been distributed all over the Wa territory in the *Gishi-Wajinden*. She identifies the illustrations on some of these mirrors as the Queen Mother of the West and the King Father of the East and states that given that “the Queen Mother is a figure from early Daoist cosmology, it would not be surprising if the Queen Mother myths entered Japan at the same time as the mirrors—either with political refugees or traders, given the times of unrest and population movements during the Daoist rebellion” (Barnes 2014:12-13). It is known through archaeology that contacts between China and Japan during that time went through Korea. This leads to the assumption that the ruling cult around queen Himiko itself came from the Korean peninsula and with it titles from the Korean peninsula that may be related to the title of queen Himiko.

In that case, we are perhaps dealing with a sound that was not native to the Pre-Old Japanese language of the Wa people on the Japanese archipelago, but possible a foreign word, maybe a loan from a kingdom on the Korean peninsula or the Chinese mainland. Therefore *hɑ>hɔ could be related to the Ancient Koguryŏ and Puyŏ title, which Beckwith transcribes in this manner:

*kar [加] ~ [千] (-Puyŏ-Paekche *kar [瑕]) ‘king(王); tribal chief; high official, minister (相)’ (> OKog ☆key [皆] ~ [支] ‘king’ (Beckwith 2004:250; see also Beckwith 2004:122–125).

As shown earlier, Pre-Old Japanese *ɔ might also give us OJ *a (*mat-rɔ : Matsura). Additional information comes from the title of the king of *Kona*, which is very similar to that of Himiko. The graphs 卑彌弓呼 LHC *pie-mie-kuŋ-hɔ could also be interpreted as a transcription of Pre-Old Japanese syllables in this way: *pi-mi-ku-ŋhɔ. For the final consonant, this could mean that the scribes were trying to transcribe either a velar fricative *x or maybe an aspirated velar plosive *kh.

As I have shown above, the Kona chieftom with the king 卑彌弓呼 *pie-mie-kuŋ-ho probably refers to the historical Kumaso people. The Japanese chronicle *Nihon shoki* from the 8th century CE record five names of Kumaso people (three chiefs and two daughters of a chief). In all instances, the name ends with OJ -kaya 鹿文. Unfortunately, there are no records of the Kumaso language, which hinders further research on this name ending. However, in my opinion there is a chance that Pre-Old Japanese 呼 *ho may somehow have something to do with the OJ -kaya 鹿文 Kumaso name ending that was used for chiefs and their daughters in sources written by the Yamato court.

A DNA-study on skeletons from the southern Kyushu area of the Hayato people, which is a newer name for the Kumaso people, has shown that genetically they were likely similar to the Wa people from Yamato (Wakebe and Saiki 2012). There are also no interpreters mentioned in texts where Wa people talk with the Kumaso, which makes me assume that they spoke a similar language as the Wa. This may also explain why the titles of the Wa queen and the Kona king were so similar.

Given the difficulties in relating this lexeme to any known Japonic word, I suspect that it is a ruling title that came from the Korean peninsula. As shown above, Beckwith reconstructs Ancient Koguryō and Puyō *kar 加 ‘tribal chief.’ The Korean linguist Nam Pung-hyun considers this language data as Koguryō dialect of Early Old Korean and reconstructs 加 *ka ‘great man, noble’ for this language stage. Alternation between /k/ and /h/ is also suggested by the fact that both 骨 *kur and 忽 *hur are graphs used for transcribing the Koguryō word for ‘district’ (Nam 2012:53).

The rulers of the Paekche kingdom, who descend from the ruling line of the Koguryō people, also record titles that may be related to this. Bruno Lewin states that the Paekche ruling elite, who were ruling over the native Mahan population, spoke a language different to the Mahan (Lewin 1980:171). This assumption is based on an entry from the *Zhōu Shū* 周書:

王姓夫餘氏，號於羅瑕，民呼爲韃吉支，夏言竝王也。(Zhōu Shū vol. 49)

“The surname of the [Paekche] king is Puyō 夫餘; he is known by the name *elaha
어라하 於羅瑕, the people call him *kenkilci 건길지 韃吉支, and both of these terms
refer to what in Chinese is called ‘king.’” (Lee and Ramsey 2011:44)

Nam reconstructs 於羅瑕 as Early Old Korean dialect of Paekche *äraha. The last part of this title, 瑕 *ha (Beckwith (2004:250) has 瑕 *kar, related to *kar 加 ‘tribal chief’ mentioned above), could also be related to 呼 *ho. Paekche aristocrats who came to Japan during the Kofun period (ca. 300–700 CE) were awarded the title OJ *konikisi*, which Lewin connects to 韃吉支 *kenkilci of the Chinese text shown above (Lewin 1980:174–175). The form *elaha may then be interpreted as a title in the language of the native Mahan population, while *kenkilci is a title of the language of the Paekche ruling elite that conquered the area later.

With the information provided above, I reconstruct 呼 *ho as Pre-Old Japanese *ha/ka ‘ruler’. I would also like to mention that according to Nam, the Silla kingdom had the concept of 慈充 *čöčüŋ ‘king, shaman’ (Nam 2012:53). A relation with the Korean word *mu* 巫 (巫) ‘shaman,’ (MdJ *miko* 巫女 ‘shrine maiden’) and ‘ruler’ could also be possible. The graph 弓 in the title of the *Kona* king 卑彌弓呼 *pie-mie-kuŋ-ho could be interpreted as a derogatory prefix as I have mentioned above, to mean 弓呼 *kuŋ-ho ‘vile-ruler’.

4.3.2 Pinamori

This word seems the most straightforward to understand, because it likely features the Japanese genitive/attributive marker *no* (< *na). This makes it relatively easy to interpret the word 卑奴母離 *pie-no-mə-liqi ‘Second official (Tsushima, Iki, Na, Fumi)’ as OJ *mori* ‘guard’ of *pi. This makes clear that *pi should be interpreted as a noun in other words containing this graph. It could be asked why this is the only title that was built with the genitive/attributive marker *no* and all other titles are joined nouns. Since OJ and other historical varieties of Japanese build nouns both ways, this should not be too surprising. It could mean that *pi-na-mori was relatively young in comparison to the other titles and not yet lexicalized as such.

4.3.3 Piko

The title 卑狗 **pie-ko* (First official in Tsushima and Iki) can relatively clearly be connected to OJ *pikwo* ‘male (descendant); prince’ that can often be found in the Old Japanese corpus. This can be connected to male/female pairs, which are also found in modern Japanese: *biko* ‘prince’ and *hime* ‘princess’ or *musuko* ‘son’ and *musume* ‘daughter.’ Thus, the syllable *-ko* refers to males and *-me* to females.

The official of the Kona chiefdom in the south of the queen’s domain also has a title like this: 狗古智卑狗 **ko-kɔ-ʈe-pie-ko*, which can be interpreted as the **piko* of 狗古智 **ko-kɔ-ʈe*. In the following section I will discuss this title in more detail. The Kona chiefdom as mentioned in the *Gishi-Wajinden* has been connected to an area in southern Kyūshū by many Japanese researchers. Based on the name Kona, many connect it to the region along the Kuma River 球磨川 in Kuma district 球磨郡 in the south of Kumamoto prefecture (Mori 2013:27–28). However, based on the title of the first Kona official, another possibility is also sometimes considered.

狗古智 **ko-kɔ-ʈe* can be connected to the lower reaches of the Kikuchi River in the Kikuchi plains (Kadowaki 2008:89–90; Kikuchi 2010:70–71). Thus, this speaks for the interpretation of the title 狗古智卑狗 **ko-kɔ-ʈe-pie-ko* as the **piko* of **kikuti*. The modern Japanese reading of this name would then be *Kikuchi-biko* 菊池彦, ‘prince of Kikuchi’. There are, however, some problems with the vowels in this reconstruction. The high front vowel cannot be explained by 狗古智 **ko-kɔ-ʈe*. Kikuchi Hideo offers a solution for this problem. He found out that the name Kikuchi is glossed *kukuti* ククチ in the *Wamyōshō* 和名抄, a Japanese dictionary of Chinese character readings completed in 938 CE (Kikuchi 2010:39, 44). The most likely interpretation for 狗古智 **ko-kɔ-ʈe* is then the area in central Kyūshū, which was called *Kukuti* in the 10th century CE.

4.3.4 Kwo

There are three titles that end with the graph 觚 **kuɔ*, which indicates that this graph could be an official title in itself. All the recorded titles are from the northern coast of Kyūshū island and

it is only present in the Na and Ito chiefdoms. I have already dealt with two of the titles in the section about the word for ‘island’ further above. Below are the three titles in question:

Chinese graphs	LHC transcriptions	Note
咒馬觚	*zi-ma-kuo	First official (Na)
泄謨觚	*siat-mo-kuo	Second official (Ito)
柄渠觚	*piaŋ-gia-kuo	Third official (Ito)

Table 24: Titles with the graph 觚 *kuo

There is one major interpretation that most scholars follow by connecting it to Proto-Japonic *kura ‘child.’ Serafim explains the development like this: Proto-Japonic *kura > Pre-Old Japanese *kwɔɔ > Old Japanese *kwo* (*ko) (cited in Miyake 2003:115).

The last graph of the queen’s title 呼 *ho has also often been connected with MdJ *ko* ‘child.’ However, this interpretation needs to be rejected based on the character 觚 *kuo. If the last graph in Himiko would indeed mean ‘child,’ the Chinese scribes would have used the graph 觚 for transcribing it the name of the queen and not 呼 *ho. This is also true for interpreting the title 卑狗 *pie-ko, which is sometimes considered as ‘sun-child.’ If this was true, it would have rather been written as 卑觚 *pie-kuo, which was not the case.

4.3.5 Ma

It can be gathered from Old Japanese words as well as some Modern Japanese words that the lexeme *-ma* meant ‘place, location’ in compounds. This can be seen in words such as MdJ *shima* ‘island’ (cf. *kisbi* ‘shore, bank’ or *hishi* ‘mid-ocean sandbank’), MdJ *yama* ‘mountain, forest’ (with *ya* ‘house’), and MdJ *ima* ‘living room’ (with *ir-u* ‘exist (animate)’).

This information might help with interpreting the title of the first official 伊支馬 *ʔi-kie-ma of the capital in Yamatai. There is one text passage from the *Gishi-Wajinden*, which I want to address before trying to interpret this title.

收租賦。有邸閣國，國有市，交易有無，使大倭監之。自女王國以北，特置一大率檢察，諸國畏憚之。常治伊都國，於國中有如刺史。王遣使詣京都、帶方郡、諸韓國，及郡使倭國，皆臨津搜露，傳送文書賜遺之物詣女王，不得差錯。

Taxes are collected for which each chiefdom has buildings. The chiefdoms have markets for trading, though not without a controlling high Wa representative. North of the queen's domain is a particular place from which a high official conducts inspection of all the chiefdoms. For this reason all the chiefdoms are always in fear and terror. He governs from the chiefdom of Ito, and throughout the domain he is like a Chinese magistrate. When the ruler dispatches envoys to visit the capital and when the Daifang commandery or the envoys of the various Han polities arrive at the Wa domain, all at the port must open everything to be examined, then [be] escorted on so that messages and gifts sent to the queen reach her in an orderly way. (Kidder 2007:16)

This passage suggests that the northern part of Kyūshū islands was especially important for international trade and representatives of the queen were used to control incoming ships. This was done by the Ito kingdom. It is mentioned in Ito “there have been kings for generations, subject to the queens kuni [Yama'ichi] they rule,” which have been connected to the Hirabaru burial site in the Itoshima peninsular in northern Kyūshū. Inspectors from the capital were present in northern Kyūshū and overseeing trade (Seyock 2003:220). It is for that reason that I believe that the first official from Yamatai should have been a representative who was overseeing trade in the northern parts of Kyūshū. We already saw the toponym for the island of Iki, which would fit the title of the first official. I suggest that 伊支馬 *ʔi-kie-ma could be interpreted to refer to the official in charge of the area around Iki island and thus to the maritime trade routes off the coast of northern Kyūshū.

Let me now address some additional titles that contain *ma. The second and third official of Yamatai have similar names. 彌馬升 *mie-ma-sin and 彌馬獲支 *mie-ma-yuak-kie, which suggest that 彌馬 *mie-ma may have been referring to a place as well, since 獲支 *yuak-kie could be related to the Pre-Old Japanese *wake* meaning something like ‘lord’ that is found in the inscription of the Inariyama sword. I will talk about this in more detail in the next section.

Another interpretation goes back to Serafim, who suggested that 彌馬 *mie-ma could mean ‘iron,’ referring to iron deposits *mimasaki* from the central Japanese area in Okayama prefecture

(p.c. cited in Miyake 2003:113). Bentley adds to this proposal the name for the southern part of the Korean peninsula, which was known as an important center for iron trade. In Japanese this place is known as Mimana and Bentley suggests the etymology *mema ‘iron’ and *na ‘land’ (Bentley 2008:22). Miyake also points to the Old Japanese *myima* (*mima) ‘grandchild of nobility’ as a possibility, which would make 彌馬獲支 *mie-ma-yuak-kie originally a title for the children of a chief. The title also bears some similarities with the first part of the name of the historical emperor Sūjin (trad. r. 97 BC – 30 BC; archaeologically corrected to 219–249 CE (Barnes 2007:22)), who was called 御間城入彦五十瓊殖 OJ *Myimakiyiripyikwoine* (*mimaki(y)iripikoine) (Miyake 2003:113).

4.3.6 Wake

One common interpretation based on the Old Japanese corpus is that 獲支 *yuak-kie represents a word related to the Proto-Ryūkyūan *weke ‘male’ (Thorpe 1983:304; cited in Miyake 2003:113), however, this word has no mainland Japanese cognates (Miyake 2003:113). Bentley rather reconstructs the reading *wake from the Chinese graphs and interprets it to mean *wa ‘land of the Wa’ and *ke the Koguryō title for ‘king’ (Bentley 2008:21–23).

A Japonic ruling title that appears on the Inariyama sword (dated to 471 CE) 獲居 *yuak-kia is rejected by Bentley based on his reconstruction of *waka in the sword inscription. However, most researchers do interpret the title 獲居 *yuak-kia of the Inariyama sword inscription to be related to OJ *wake*.

The Inariyama sword was excavated from the Inariyama burial mound close to present-day Tōkyō in 1968 (Seeley 1991:20). The first philological study on its inscription was done by the Japanese linguist Murayama Shichirō and Roy Andrew Miller. Below I provided a more recent traditional interpretation of the inscription and the line numbers of the inscription.

Front:	
(1) 辛亥年七月中記乎獲居 臣上祖名意富比埵	Written in the seventh month, in the year of <i>xinbai</i> [AD 471], I am a subordinate, <i>Wowake</i> . The first ancestor was <i>Ohobiko</i> .
(2) 其兒多加利足尼其兒名 弓已加利獲居	His son was <i>Takarinosukune</i> , his son was <i>Teyokariwake</i> ,
(3) 其兒名多加披次獲居其 兒名多沙鬼獲居	His son was <i>Takahisiwake</i> , his son was <i>Tasakiwake</i> ,
(4) 其兒名半弓比	His son was <i>Hatehi</i> ,
<hr/>	
Back:	
(5) 其兒名加差披余其兒名 乎獲居臣世々爲杖刀人	His son was <i>Kasabiyo</i> and his son was a subordinate, <i>Wowake</i> . For generations, as a sword-bearer,
(6) 首奉事來至今獲加多支 鹵大王寺在斯鬼	My family has served the kings until now.
(7) 宮時吾左治天下令作此 百練利刀記吾	When Great King <i>Wakatakeru</i> presented at the palace of <i>Shiki</i> , I helped the king govern the world
(8) 奉事根原也	And I ordered this sword, forged 100 times, to be made as a record of my service.

Table 25: Inscription and translation from the Inariyama sword (from Kim 2009:237; italics added by me)

Hong interprets *Wowake* (乎獲居) in the following way: “*Oho Wake* (乎獲居) implies the Great Prince. The Chinese character for *wake* (別) in the *Nihongi* and *Kojiki* seems to originate from the word *beg* in Turkish, *begi* in Mongolian, and *belie* in Manchu language, all implying prince or feudal ruler in the Altaic world” (Hong 2010:123). This seems to suggest that the title was of Korean peninsular origin and possibly related to the Paekche chiefdom that emerged out of one of the Mahan polities in the southwest of the Korean peninsula. This is also made clear by a detailed interpretation of 乎獲居 *Wo Wake* by Kim Yongduk:

This name has the title [獲居] “Hwakko.” It suggests that Ko (or Ho) was appointed to rule the land as a lord. Now the name “Ko” (or “Ho”) is a place name, which could [mean] a son or descendant in Baekje or Gaya just as in the name of King of the Huns, Tangri Ko To or Heavenly Son the Great. There are many names such as “Ho” or “Ko” (as in the name of “Hokauhko” 或加優呼) in the records of the third century Wei China in reference to a Mahan king’s name, among others.

As for [獲居] “Hwakeo,” Murayama and Miller point out that its last syllable should be read as “keh,” so the whole word should be read as “wakeh,” which means a feudal lord in the Altaic language. Thus it must be so as a Baekje word as well (as the Baekje language is Altaic). It turns out the correct pronunciation for the character “獲” in the third and fourth centuries is “Hwak.”

As will be explained shortly, there is a word “Hwakka,” which means, “supreme lord” as we shall all later. Thus, we believe this word for a lord in its original Baekje word is to be pronounced “Hwakko.” (Kim 2009:245)

The fact that another title that came from the Korean peninsula is present in the Pre-Old Japanese corpus also ties in well with the interpretation of the title of Queen Himiko and the king of Kona as being of Korean peninsular origin. This suggests considerable influence from the ruling elites of the Korean chiefdoms during that time and a close cultural connection between the Japanese archipelago and the Korean peninsula. The titles from the Korean peninsula may have found their way into Pre-Old Japanese through immigrations of the dynastic powers from Korea, which can be seen in the first Old Japanese historical sources as well.

Part 5: Conclusion

I have dealt with the information on the Pre-Old Japanese corpus from the third century CE and interpreted some of the titles and toponyms recorded in it. This has provided a glimpse of the historical stage of the Japanese language from the third century that can now be used for assessing the language relationship with the Ryūkyūan languages. I would now like to address the question of the split of Japonic into the Ryūkyūan and Japanese branches.

Since the information gained from the *Gishi-Wajinden* is unfortunately very scarce for assessing the question of when Japonic split, only an indication as to how Japonic developed historically can be given. In particular, three nouns from the corpus can be used with some certainty for comparing the Pre-Old Japanese corpus with the Ryūkyūan languages. These are *sima ‘island,’ *yama ‘mountain,’ and *pi in the interpretation ‘sun.’

Both *yama and *sima have cognates in the Ryūkyūan languages and apart from a slight difference in meaning (*yama also means ‘forest,’ which is only found in some mainland Japanese dialects, but not in modern Japanese) it is basically the same word with no sound changes.

*pi is a different matter and may be the most important lexeme for understanding how Japonic developed.

Another important finding of my thesis is that some of the titles can be connected to cultural imports from the kingdoms of the Korean peninsula (especially that of the Mahan confederacy that later turned into the Paekche kingdom), the area from where the Japonic language family is thought to have spread to the Japanese archipelago. This implies a strong influence from the dynastic culture of these kingdoms and the importance of their titles. However, as the linguist Juha Janhunen has pointed out, there were two languages present in the Paekche kingdom that followed the Mahan confederacy (Janhunen 2005). Paekche was one of the 55 Mahan chiefdoms that were recorded in the *Gishi-Wajinden* (transcribed by the Chinese scribes as 伯濟 *pak-tsei). Paekche later conquered the whole area of Mahan and founded the Paekche kingdom. According to the book on Paekche (volume 23) in the first Korean historical source *Samguk sagi* 三國史記 (1145 CE), it was founded in 18 BC by king Onjo, the son of the legendary founder of the Koguryō

kingdom Chumong (trad. r. 37–19 BC) (Best 2006:205). This suggests a close connection between the ruling elites of Paekche and Koguryō. The dynastic language of Paekche may have provided the cultural vocabulary from the ruling elite such as official titles to the Wa, but there may also be a native title from the native Mahan population as well.

The relation of the dynastic and native languages of Mahan and Paekche need to be dealt with separately and were not part of this thesis. The important point for the split of the Japonic language family is whether these influences can also be found in the Ryūkyūan languages. If Japonic split after the Pre-Japanese corpus of the third century CE, then we would expect to find this influence in Ryūkyūan. If the languages can be thought to have split before that, we should be able to show that these elements are not present in Ryūkyūan or can be explained by later contact with the Japanese mainland.

One important concept I would like to consider further is that of how ‘sun’ and ‘fire’ are reflected in Ryūkyūan and Japanese. The sun seems to have been of great religious importance for the people of Wa in the third century CE, which is reflected by archaeological findings of mirrors from the Chinese mainland. Gina Barnes has suggested that these “deity-beast mirrors” are related to Daoist beliefs from the Chinese mainland and came to Japan during the late second century CE (Barnes 2014).

Based on that, we can now assess the concepts of fire and sun in relation to *pi. It seems clear from the titles recorded in the *Gishi-Wajinden* that *pi was of great importance in the religious beliefs of the Wa people, which is reflected in the use in titles such as *piko, *pi-na-mori, *pimiko and *pimikuko. If *pi then indeed meant ‘sun’ and was further so important for those people, we would also expect that it is reflected in the Ryūkyūan languages that went south from the Japanese mainland.

I will here consider not only the word for ‘sun,’ but also that for ‘fire,’ since these two concepts seem to be closely related and both are *hi* in modern Japanese. While most Ryūkyūan languages have a cognate of MdJ *hi* ‘sun,’ which is reconstructed as Proto-Ryūkyūan *pi, some islands also have different words for the two concepts. The word for fire that is present on many islands

can be reconstructed as *umati ‘fire’ (Bentley 2008:260). There is also another word for ‘sun,’ which can be reconstructed as Proto-Ryūkyūan *teda (cf. Bentley 2008:289; Thorpe 1983:336–337). The etymology of *teda ‘sun’ is not clear yet. Mamiyama Atsushi discusses some options for the etymology of this word. The most common etymologies seem to be MdJ *tentō* 天道 ‘god of the sun’ (< MJ *tentau*) or *teras.u* 照る ‘to shine’ (Mamiya 2008:25).

In my opinion, the existence of *umati ‘fire’ and *teda ‘sun’ in some Ryūkyūan languages shows that there is an older layer for the language and the instances of *pi for ‘sun’ or ‘fire’ stem from a later layer of contact with the Japanese mainland. Note that is highly unlikely that Ryūkyūan innovated these terms, since both ‘fire’ and ‘sun’ are globally among the most stable concepts (List, Cysouw and Forkel 2016:2398) and resistant to borrowing, ‘fire’ actually being the most resistant concept to borrowing there is according to Haspelmath and Tadmor (2009). Accordingly, they rather reflect proto-Japonic terms lost in Japanese.

Thus, this suggests that there were at least two migration movements to the Ryukyu islands from the Japanese mainland, the second of which brought – among other things – the use of the word *pi.

Title	LHC	Reconstruction
卑彌呼	*pie-mie-ho	*pi-mi-xa ‘sun-religious(?)–ruler’
卑奴母離	*pie-no-mə-liai	*pi-na-mori ‘sun-GEN-guard’
卑狗	*pie-ko	*pi-ko ‘sun-descendant (prince)’
狗古智卑狗	*ko-ko-ʔe-pie-ko	*kukuti-piko ‘prince of Kikuchi’
泄謨觚	*siat-mo-kuo	*sima-kwo ‘island-official’
兕馬觚	*zi-ma-kuo	*sima-kwo ‘island-official’
伊支馬	*ʔi-kie-ma	*iki-ma ‘place of Iki’
彌馬獲支	*mie-ma-yuak-kie	*mi-ma-wake ‘royal-place-lord’
Toponyms	LHC	Reconstruction
奴	*na	*na ‘field’
伊都	*ʔi-to	*ito ‘thread’
末廬	*mat-lo	*matura ‘pine-bay’
斯馬	*sie-ma	*sima ‘island’
對馬	*tuəs-ma	*tu-sima ‘port-island’
投馬	*do-ma	*tu-ma ‘port-place’
邪馬	*ja-ma	*yama ‘mountain, forest’
邪馬壹	*ja-ma-ʔit	*yama-iti ‘mountain-market’

Table 26: Preliminary reconstructions of the Pre-Old Japanese corpus

It should also be noted that research on the cultural vocabulary of Ryūkyūan has shown that many terms that can be connected to the Yayoi period in Japan can also be reconstructed for Proto-Ryūkyūan. Thomas Pellard has tabulated some important findings for Ryūkyūan, as can be seen in the table below.

	PR	Shodon	Shuri	Ōgami	Ishigaki	Dunan
‘rice’	*kome	k ^h umǎ·	kúmí			
‘rice’	*mai		mê:	maw	mái	màí
‘rice plant’	*ine	ʔínǎ·	n [?] ní		íní	nnì
‘unhulled rice’	*momi	Mûm	múmì			mumi
‘wheat’	*mogi	múgǎ·	múzí	mukw	múnj	mùnj
‘foxtail millet’	*awa	ʔǒ:	ʔáwá	a:	á:	à:
‘broomcorn millet’	*kimi	k [?] ímǎ·	mâ:-zìj	kwm	kínj	tɕ [?] in-ti
‘taro, yam’	*umo	ʔúmǎ·	m [?] mú	m:	únj	ùn-tí
‘field’	*patake	xàtǎ·xó	hátákí		pàtágí	hàtágí
‘rice paddy’	*ta	thǎ:	tá:	ta:	tá:	t ^h ǎ:
‘cow’	*usi	ʔû·ɕ	ʔúɕì	us	úsì	ùtɕí
‘pig’	*uwa	w [?] ǎ:	w [?] á:	ua:	ó:	wà:
‘horse’	*uma	ʔúmǎ:	m [?] má	nu:ma	mámá	màmá
‘pot’	*tubo	t [?] ǎbû·	tsíbù	kwpu	tsíbù	tɕ [?] ǎbú
‘jar’	*kame	k ^h ámǎ·	ká:mí	kami	kami	k ^h ami
‘boat’	*pune	ɸúnǎ·	ɸúní	funi	ɸúní	nnî
‘sail’	*po	ɸû:	ɸû:		pû:	hú:
‘paddle’	*ijako	júhǒ·	ʔé:kú	waku	jákú	dànù

Table 27: Cultural vocabulary of Ryūkyūan (Pellard 2015:26)

I would like to point out some concepts that are also mentioned in the *Gishi-Wajinden*. It states that the Wa people had “no cattle, horses, tigers, leopards, sheep, or magpies” (Kidder 2007:15). This is interesting, given that in the section on the three Han states of southern Korea, there are two more mentions about the use of horses. In regard to the Mahan 馬韓, it is said that they “do not know how to ride oxen or horses. Their oxen and horses are used entirely [as sacrifices] to send off the dead” (Byington 2009:142). However, the Pyŏnhan are said to “ride oxen and horses and have them pull carts” (Byington 2009:146). The domesticated horse was only introduced to Japan in the Kofun period (ca. 300–710 CE). Pellard reconstructs the Proto-Ryūkyūan word for horse as *uma. This would suggest that the Ryūkyūan languages all derive from an ancestor language that already had the word for ‘horse.’

I would like to point out that archaeological research on the spread of people to the Ryūkyū islands has shown that the process was relatively slow and was only completed around the 11th or 12th century CE, when the “Gusoku Culture spread down the Ryukyu chain from Japan, bringing agriculture, the contemporary Ryukyuan languages and new cultural items such as iron and Chinese ceramics” (Hudson 2017:191). Before that time, the southernmost Ryūkyū islands (Sakishima islands) had “no significant contact with the cultures of the Central Ryukyus or Kyushu” (Pearson 2013:80). The northern parts of the Ryūkyū islands were already in contact with the Japanese mainland during the mid-Yayoi period (ca. 300 BC – 300 CE), when “shell trade between Okinawa and Kyushu reached its peak” (Hudson 1999:189). Therefore, the northern parts of the Ryūkyū islands extending all the way to Okinawa island were already settled during the Yayoi period before the Pre-Old Japanese corpus was written, but the Sakishima islands to its south were not settled until much later. Because of the frequent contact between the southern parts of Kyūshū and the northern parts of the Ryūkyū islands, cultural vocabulary such as PR *uma ‘horse’ could have also entered Ryūkyūan as loans from mainland Japanese, which were influenced by new cultural advances from the chiefdoms of the Korean peninsula.

Nevertheless, the information from the *Gishi-Wajinden* is not enough to be able to confidently conclude that the Japonic language family split into the Ryūkyūan and Japanese branches before the Pre-Old Japanese corpus was recorded in the third century CE. More research is needed to advance our knowledge on dating the split of the Japonic language family. One possible approach could be analyzing the color terms of Japonic. In the language materials for Ryūkyūan I was able to find the basic color terms for white, black, red, and blue/green. Since the development of color terms in languages can be dated very roughly, it would be interesting to find out whether Ryūkyūan has a native word for ‘green,’ which is *midori* in Modern Japanese.

From the data I have dealt with in this thesis I assume that Japonic split into the Japanese and Ryūkyūan branches before the third century CE, but speakers of both languages were still in regular contact and traded with each other. Through this contact, vocabulary of new cultural technologies found its way also into the Ryūkyūan languages.

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Appendix A: Abstract (English)

Japanese is considered to belong to the Japonic language family with the Ryūkyūan languages south of mainland Japan. The historic relationship between Japanese and Ryūkyūan is not fully understood yet, but researchers generally agree that they must have split before the Old Japanese corpus was recorded in the eighth century CE.

In this paper I have reconstructed some of the Japonic language fragments from the Chinese text called *Gishi-Wajinden* (third century CE) based on the reconstruction of Later Han Chinese and Old Japanese phonology. The data was analyzed regarding the dating of the split of the Japonic language family into the Japanese and Ryūkyūan branches.

For example, the Pre-Old Japanese word *pi ‘sun’ can be connected to cultural influence from the Korean peninsula. Since some Ryūkyūan languages have another word for ‘sun,’ which can be reconstructed as *tida for Proto-Ryūkyūan, I assume that the original Ryūkyūan speakers spread southward from the Japanese mainland before the third century. This also suggests that there was considerable contact between the Ryūkyū islands and mainland Japan, which is how cultural vocabulary from the Korean peninsula may have reached the Ryūkyū islands.

Appendix B: Abstract (German)

Japanisch wird mit den südlich des japanischen Festlandes gelegenen Ryūkyū-Sprachen als japanische Sprachfamilie klassifiziert. Die historische Beziehung zwischen Japanisch und den Ryūkyū-Sprachen ist noch nicht vollständig geklärt, aber Wissenschaftler sind sich grundsätzlich einig, dass sie sich vor der Erstellung des altjapanischen Korpus im achten Jahrhundert gespalten haben.

Basierend auf der Rekonstruktion der späteren Han-chinesischen und der altjapanischen Phonologie habe ich in dieser Arbeit einige der japanischen Sprachfragmente aus dem chinesischen Text namens *Gishi-Wajinden* (drittes Jahrhundert) rekonstruiert. Die Daten wurden hinsichtlich der Datierung der Spaltung der japanischen Sprachfamilie in die Zweige Japanisch und Ryūkyū analysiert.

Zum Beispiel kann das vor-altjapanische Wort *pi ‚Sonne‘ mit dem kulturellen Einfluss der koreanischen Halbinsel in Verbindung gebracht werden. Da einige Ryūkyū-Sprachen ein anderes Wort für ‚Sonne‘ haben, das als *tida für Proto-Ryūkyū rekonstruiert werden kann, gehe ich davon aus, dass sich die ursprünglichen Ryūkyū-Sprecher vor dem dritten Jahrhundert vom japanischen Festland nach Süden ausbreiteten. Dies deutet auch darauf hin, dass zwischen den Ryūkyū Inseln und dem japanischen Festland ein beträchtlicher Kontakt bestand, und das kulturelle Vokabular der koreanischen Halbinsel so zu den Ryūkyū Inseln gelangt sein könnte.