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## Note to the reader

When transcribing terms from Japanese, Korean or Chinese texts traditional Chinese characters will follow their italicized transcription. Japanese terms are transcribed in modified Hepburn romanization, Chinese terms are given in Hanyu Pinyin and Korean terms are given in McCune-Reischauer transcription. Because old documents write the ancient Korean Gojoseon kingdom as 朝鮮, I will transcribe it as ‘Chosŏn’. Personal names from the *Kojiki* are given in full followed by the Kanji used in the *Kojiki* at first occurrence and in their simplified English version thereafter.

Dates from old Japanese, Chinese and Korean sources are converted to the corresponding year in the Gregorian calendar. Translations of Old Chinese sources were translated by me unless otherwise indicated. Whenever possible, I added the original Chinese characters to the English translations of Old Chinese texts. All those texts can be found on <https://zh.wikisource.org/> by searching for the relevant Chinese book (see the section Sources below). I will use a dot as delimiter for thousands (1.000) and a comma as decimal separator (0,1%).

Square brackets inside quotation marks are usually added by me. If they already existed in the original, it will be mentioned specifically. In the historical context, I will use ‘Korea’ to refer to the area of the southern Korean peninsula and the kingdoms present there, which is not necessarily related to present-day Korea. Similarly, ‘Chinese’ is used to refer to the Chinese dynasty of the referred time or the geographical area of the Chinese mainland. I hope that the correct associations will be clear from the context of the statement and the readability of the text will be enhanced.

## Abbreviations

### Languages

|      |                                 |
|------|---------------------------------|
| EOK  | Early Old Korean                |
| EMJ  | Early Middle Japanese           |
| LHC  | Later Han Chinese               |
| MC   | Middle Chinese                  |
| OJ   | Old Japanese                    |
| PAN  | Proto Austronesian              |
| PMP  | Proto Malayo-Polynesian         |
| PWMP | Proto Western Malayo-Polynesian |

### Sources

|            |                                                                                                                                                                                                                                                                                                                                                 |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>GWJ</i> | <i>Gishi-Wajinden</i> 魏志倭人伝, <i>Accounts of the Wa people in the Records of Wei</i> (by 297 CE): The section of the <i>SGZ</i> (vol. 30) that gives information on the Wa people. This name is usually used in Japanese sources.                                                                                                                |
| <i>HHS</i> | <i>Hòu Hànsū</i> 後漢書, <i>Book of the Later Han</i> (by 445 CE): History of the Later Han (25–220 CE), a composite work, the major portion of which was compiled by Fan Yeh (398–445 CE) of Liu Song.                                                                                                                                            |
| <i>HNS</i> | <i>Hàn Shū</i> 漢書, <i>Book of Han</i> (by 92 CE): History of the Former Han Dynasty (202 BCE–9 CE), compiled by Ban Gu (32–92 CE) of Later Han in the reign of Ming-di. Han-shu was begun by Ban Biao (3–54 CE), father of Ban Gu. The latter's sister Ban Zhao added some contributions. <sup>1</sup>                                          |
| <i>JNS</i> | <i>Jīn Shū</i> 晉書, <i>Book of Jin</i> (by 649 CE): History of the Western Jin (265–316 CE), compiled by Fang Xuanling, Li Yan-shou and others during the reign of Emperor Tai-zong (626–649 CE) of Tang.                                                                                                                                        |
| <i>KJK</i> | <i>Kojiki</i> 古事記 <i>Records of Ancient Matters</i> (712 CE): Japan's oldest extant chronicle and collection of myths, legends and traditions, compiled by Ōno Yasumaro in 711 CE. <sup>2</sup>                                                                                                                                                 |
| <i>LGS</i> | <i>Liáng Shū</i> 梁書, <i>Book of Liang</i> (by 636 CE): History of the Liang Dynasty (502–577 CE), compiled by Wei Zheng and Yao Si-lian during the reign of Emperor Tai-zong (626–636 CE) of Tang.                                                                                                                                              |
| <i>LNH</i> | <i>Lùnbéng</i> 論衡, <i>Disquisitions</i> (by 84 CE): 84 philosophical essays on physics, religion and folklore, finished by Wang Ch'ung (27–ca. 97 CE) in the period 76–84 CE (Forke 1907:2–9).                                                                                                                                                  |
| <i>NSK</i> | <i>Nihon Shoki</i> 日本書紀, <i>The Chronicles of Japan</i> (720 CE): Japan's second oldest extant chronicle and the first of its Six National Histories compiled by Fujiwara no Fuhito in 720 CE.                                                                                                                                                  |
| <i>SGS</i> | <i>Samguk sagi</i> 三國史記, <i>A History of the Three Kingdoms</i> (1145 CE): Historical record of the three Korean kingdoms Koguryō, Paekche and Silla, compiled by Kim Pu-sik (1075–1151 CE) in 1145 CE.                                                                                                                                         |
| <i>SGY</i> | <i>Samguk yusa</i> 三國遺事, <i>Legends of the Three Kingdoms</i> (by 1289 CE): Collection of legends, folktales and historical accounts relating three Korean kingdoms, compiled by Ilyōn, the National Priest of Koryō (1206–1289) (Ha and Mintz 1972:5).                                                                                         |
| <i>SGZ</i> | <i>Sānguó Zhì</i> 三國志, <i>History of the Three Kingdoms</i> (by 297 CE): History of the three states Wu (222–280 CE), Wei (220–266 CE) and Shu (221–263 CE), compiled by Chen Shou (233–297 CE) of Western Jin.                                                                                                                                 |
| <i>SHJ</i> | <i>Shānhǎijīng</i> 山海經, <i>Guideways through Mountains and Seas</i> (by the 1 <sup>st</sup> century BCE): Records of a wide range of beliefs held by the ancient Chinese about their world (religion, mythology, geography, flora, fauna, minerals and medicine). An encyclopedic cosmography mostly compiled from the Warring States period to |

<sup>1</sup> Data on Chinese records are from Hong (1994:284–285) if not indicated otherwise.

<sup>2</sup> Information on *KJK* and *NSK* from Delmer Brown (<https://jhti.berkeley.edu/search%20gateway.html>)

the Western Han dynasty (ca. 4th–ca. 1st cent. BCE), it has been repeatedly hand-copied, reprinted and re-edited through the centuries into our own time (Strassberg 2002:xiii).

- SOS* *Sòng Shū* 宋書, *Book of Song* (487 CE): History of the (Liu) Song (420–479 CE), compiled by Chen Yue (441–513 CE) of Southern Qi (479–502 CE) and Liang (502–557 CE) in 487 on the basis of an old text compiled by Xu Yuan.
- XTS* *Xīn Tángshū* 新唐書, *New Book of Tang* (by 1060 CE): [New] History of the Tang, edited by Ou Yang Xiu (1007–1072 CE) and Song Qi (998–1061 CE) of Song during the period 1044–1060 CE.
- ZHS* *Zhōu Shū* 周書, *Book of Zhou* (by 636 CE): History of Northern Zhou (556–581 CE), compiled by Linghu Defen.



# 1. Introduction

The Japanese language has been considered a language isolate without any known surviving relatives for many years. Many attempts have been undertaken to relate other languages that are geographically close to the Japanese archipelago and its language, but to no avail. In this thesis I will revisit some of the most discussed theories and present some evidence to better understand those standpoints.

Japanese is no longer considered to be a language isolate, as it is now generally agreed upon that Ryūkyūan is a sister language of Japanese (Pellard 2015:16). Therefore, the Ryūkyūan languages found in the Amami Islands, Okinawa Islands, Miyako Islands and Yaeyama Islands to the south of the Japanese mainland (Shimoji 2010:1) and Japanese are grouped together in the Japonic language family.

This goes back to the 1990s, when Leon Serafim coined the term ‘Japonic’ to refer to this language family (Vovin 2017). While the date of the split of these two language groups is still debated with proposals ranging from the 2<sup>nd</sup> century BCE (Lee and Hasegawa 2011) to the end of the first millennium CE (Unger 2009:100), most scholars agree that a split must have happened before Old Japanese was recorded in the 8<sup>th</sup> century CE (Pellard 2015:23).

Ryūkyūan plays an important role in the search for the origins of the Japanese languages, because it preserves some archaic features not found in Old Japanese. Therefore, it is essential to use Ryūkyūan language data for reconstructing Proto-Japonic, the language that was spoken in Japan before the split of the Japanese and Ryūkyūan branches. Although research efforts are increasing, a complete reconstruction of Proto-Japanese will require further research.

## 1.1. Research question

This thesis is concerned with the origins of the Japonic languages and their spread to the Japanese archipelago. It aims at giving an overview over the most important evidence and theories that can be found across different fields of research. To my knowledge, no systematic compilation of the different data available has been conducted yet. For that reason, I will consider data from several areas, such as genealogy, archeology, mythology, cultural anthropology and historical sources that could facilitate important research in the future to enhance the information currently available on the origins of the Japanese languages.

Due to the length restrictions of this thesis, I will confine myself to a general overview with limited in-depth analysis of the provided materials. Based on the conclusions of these individual

sections, I intend to propose a hypothesis for future consideration. This will provide a basic understanding of different data from various fields, which should then be reconciled to generate a more coherent picture of the prehistory and origins of the Japanese languages.

This thesis will investigate information from the fields outlined above on the following questions, ordered from most to least important:

- (1) Where are the geographical origins of the ethnic group that brought the earliest form of the Japonic language family to the Japanese islands?
- (2) When did the earliest speakers of Japonic reach the Japanese islands?
- (3) Where did they first enter the Japanese islands?
- (4) Which route did they take to get there?
- (5) How was the language of the early Japanese speakers influenced by other languages they interacted with during their journey?

The first two questions will work towards providing a geographical and temporal framework for locating historical language data that can be compared to Proto-Japonic by future research through the comparative method of historical linguistics. Answering the latter three questions will provide a better understanding on how the Japonic languages developed and allow for a more detailed picture of their formation.

In the past, scholars have compiled extensive word lists to compare the Japanese language with languages of the Korean peninsula as well as with languages from the south, like Austronesian and Tai-Kadai (Martin 1966, Kawamoto 1977, Whitman 1985, Benedict 1990, Starostin Dybo and Mudrak 2003, Robbeets 2005). In addition to that, comparisons of morphology (Korean), prosody (Austronesian) and dialectal research have been carried out. There have also been attempts to connect Japanese to other areas through myth, belief and religion. Also, the study of DNA led to some insight on the origins of the Japanese people. However, all the data available from these research fields need to be combined to provide the best possible basis for analyzing the origins of the Japanese languages.

This can be achieved by applying a multidisciplinary approach that offers a varied perspective on the questions outlined above. For this, historical sources on languages (Old Japanese, Ryūkyūan and ancient languages from the Korean peninsula), genealogy, archaeology, material culture, anthropology and mythology of Japan will be examined. Many theories put forward in research base their theories only on a fraction of the available data, which in my opinion is insufficient for handling such a complex question. The next section will outline the approach I will follow in this thesis.

## 1.2. Methodology

As linguistic data to analyze the history of the Japanese language is not sufficient, this multidisciplinary approach will provide a variety of data to enhance the picture of how Japanese evolved through the course of history and where it could possibly have come from. Additionally, I will aim to provide cultural reconstructions of the people who can be assumed to have spoken a Japonic language.

I will largely follow the historical method outlined by Richard Zgusta (Zgusta 2015:9–20). It is based on the following sources for the historical reconstruction of non-literate cultures: (1) ethnology, (2) archaeology, (3) historical and comparative linguistics (4) oral and documentary history and (5) biological anthropology (Zgusta 2015:9). These general fields provide the information that I will then analyze with the methods given below.

One of the most important principles of the multidisciplinary approach is that of “cross-disciplinary verifications” (Zgusta 2015:12). Peter Bellwood also points out that a coherent reconstruction of the genesis of language families can only be achieved by connecting language spreads to language speakers and subsequently to archaeological records (Bellwood 2005:19). Failure to do so will result in erroneous interpretations based on skewed data samples. Therefore, it is imperative to evaluate the available data carefully to construct a balanced view that incorporates diverse sources without favoring one discipline over the others (Zgusta 2015:13).

An important concept for connecting a language to a cultural sphere is that of the ‘culture area’. This is especially useful in geographically confined areas where language and culture of a people overlap to a high degree and has been applied to research on the Bantu and Austronesian languages, among others (Zgusta 2015:11). In the case of Japanese, this concept may be applicable as long as the Japanese culture and language were present on the geographically confined area of the Japanese archipelago. By contrast, it cannot be used for reconstructions of migratory movements outside of Japan in the more distant past, because the complex nature of the cultural interactions on the continent.

Another linguistic technique that connects people to culture and language families is the “words-of-things method,” which assumes that if words of something can be reconstructed for a proto-language, the thing that it refers to was likely of cultural importance (Crowley and Bown 2010:312). This method mainly focuses on the comparison of lexical cognates, which “leads to a historical study of divergence from an ancestral protolanguage to daughter languages that make up a language family.” Focusing on borrowings also offers valuable information on the route of cultural and lexical dispersal and studies the “convergence of languages spoken within a defined area” (Zgusta 2015:14).

Additionally, written historical sources as well as oral histories provide an important source of information. When interpreting those sources, it is necessary to understand the context of how the information was recorded, because in many cases, historical texts show an external perspective and were written in a different cultural background. Therefore, the texts depict an incomplete picture that often emphasizes exotic elements and is distorted by the worldview of the writers (Zgusta 2015:16). Zgusta gives this example:

For example, the Chinese document “The Account of the Wa” not only verifies the picture of Japan during the prehistoric Yayoi period [...] obtained from archaeological excavations, but adds information that would be difficult to deduce on the basis of purely archaeological material but that nevertheless conforms to the general archaeological picture. That is, the archaeological background is an adequate proof that corroborates the description of customary law, social organization and political structure of the Yamatai State of that period. (Zgusta 2015:16–17)

Nevertheless, the effectiveness of this multidisciplinary approach relies heavily on the availability of data. Especially for reconstructions in the prehistory of a language, the available data often does not suffice. It is therefore inevitable that some aspects of a language cannot be recovered through cross-checking of different disciplines and some holes in the cultural reconstruction need to be tolerated (Zgusta 2015:17).

Moreover, the approach also needs to be adjusted in order to fit the research question of every project. This is necessary to account for the unique body of source material that every individual question entails:

Focusing on a prehistoric culture, especially one without any known ethnographic descendant, necessitates an archaeological emphasis; a reconstruction of a culture associated with a proto-language speaking population inevitably leans on linguistic data as a primary source, and a study of political developments depends mainly on examining oral histories or documentary records. The method of this study can be labeled as “historical anthropology,” [...] which seems to apply the most appropriately to the study of diachronic cultural reconstruction. (Zgusta 2015:19)

In my research I have adapted the research fields proposed by Zgusta to better fit the material available for the Japanese language and arranged them in individual chapters, starting from the discipline that provides the most archaic information – genealogy. I have also decided to include a substantial review of primary historical sources to form a basis for contextualizing the findings of the other disciplines.

This means starting with genealogical data to explain the ancient population movements into the Japanese archipelago and what traces of these ancient populations can still be detected in modern Japanese. Historical data will then be used to relate the data from genealogy to the first recorded form of the Japanese language. This will serve as a starting point for further research and

historical mentions of those speakers of the Japanese language can then be traced further into the past.

In order to tie the population movements known from genealogy to the spread of the Japanese language, linguistic data connecting the Japanese language to an area outside of the Japanese archipelago corresponding with these population movements will be analyzed. I will also give a brief overview of the people known to have lived in areas where Japonic may have been spoken in the past.

The next important piece of information that allows research to look further into the past of a certain population is that of their oral and written history. I have chosen to limit myself to the oldest written sources of Japanese mythology from the 8<sup>th</sup> century CE. This is mainly done through comparative mythology, comparing the Japanese myths to other myths in adjacent areas and therefore classifying the origins of these early myths.

This will be followed by archaeological research on the most important farming technology of the Japanese speakers where it could have come from. It is also important to investigate how these technologies have spread within the Japanese islands and what the interaction with native populations of the areas was like. The subsistence patterns detected for Japan can then be compared to other areas in East Asia to determine how agriculture spread and when such a dispersal could have happened.

The last discipline I would like to consider is that of ethnology, as there may have been more than one immigration movements into Japan. By analyzing the cultural anthropology, the original immigrants that spoke the precursor to the Japanese language and information on how they were living can be detected. Crucially, this will help to create the earliest picture of Japanese speakers in Japan by eliminating cultural traits that came to Japan either after the initial immigration of Japonic speakers or were already present in Japan before. This will also provide prospects for future research.

Once all data has been handled, I will try to provide a hypothesis for the origins of the Japonic language family that can be verified by future research through comparing language data from people that were living in the supposed homeland of the Japonic speakers with that of Proto-Japonic.

## 2. Previous research

The origins of the Japanese language have been debated among generations of scholars, but despite extensive research, no satisfying answer has been found yet. I will give an overview and examine the main theories developed and discussed in the last decades.

It is generally agreed upon that the Japanese islands have experienced two major waves of immigration during history, the first of which occurred during the Jōmon period, followed by immigrations during the Yayoi period. This is known as the ‘dual structure hypothesis’ which was formulated by Hanihara Kazurō (Hanihara 1991). The Jōmon people are thought to have been a hunter-gatherer society that occupied the Japanese islands until extensive immigration occurred from the Korean peninsula, giving rise to the Yayoi culture that introduced wet-rice agriculture, iron tools and the use of domesticated horses in the first millennium BCE (Takahashi 2009; Iizuka and Nakahashi 2012; Miyamori *et al.* 2015).

Based on this model, I believe that there are essentially three main possibilities for the genesis of the Japanese language. Firstly, the Japanese language descended from the then prevalent Jōmon languages. Secondly, the Yayoi immigrants replaced the language spoken in the islands with their own language from the Korean peninsula; or thirdly, the language of the Jōmon people and the language of the Yayoi immigrants intermixed and created a new, mixed language. In the following sections I will give an overview of previous research on proposed candidates for substrate or genetically related languages to the Japanese language as well as language similarities thought to be due to contact situations and borrowings.

### 2.1. Ainu

The exact nature of the Jōmon languages is difficult to research due to a lack of suitable material. The only surviving language family that is thought to have been present during the Jōmon period is probably the language of the Ainu people, an ethnic group native to the island of Hokkaidō in northern Japan.

According to a detailed overview by Nishioka and Schenck (1937:25–26), the first suggestion of a relationship of Japanese with the language of the Ainu people goes back to Heinrich von Siebold in 1879, whose theory was further developed by Koganei Yoshikiyo<sup>3</sup> (1889) and Neil Gordon Munro (1907). The theory of a genetic relationship between Ainu and Japonic has declined in favor over the years, so that major research on the Ainu language in the 20<sup>th</sup> century has not focused on a relationship between Ainu and Japanese anymore (Janhunen 2003:479; Satō 2010).

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<sup>3</sup> Sometimes also transcribed as Koganei Ryōsei.

Nowadays, research generally agrees that there is no genetic relationship between Japanese and Ainu (Satō 2010:279). This was also shown by the reconstruction of Proto-Ainu by Russian-American linguist and philologist Alexander Vovin. According to his research, lexical similarities between Ainu and Japanese are due to loans from Japanese and therefore a genetic relationship of the languages can be excluded (Vovin 1993:158). Moreover, Vovin proposes a contact relationship between the Ainu language and the language of Nivkh of eastern Russia (Vovin 2016). The origins of the Ainu language are not known, but it is thought that Jōmon populations were speaking a proto-Ainu language (Hong 2005:8).

## 2.2. Altaic and Koreanic

According to Samuel Elmo Martin, the first proposal of a Japanese-Korean relationship was given as early as 1717 by Arai Hakuseki and was later further developed by W. G. Aston (1972, first published in 1896) and Kanazawa Shōsaburō (1910). However, those attempts, along with that of Hattori Shichirō, did not withstand criticism (Martin 1966:186–187). A genetic relationship of Japanese and Korean was proposed by Martin in 1966, who carried out extensive lexical comparison on the two languages. In his study, Martin gives a list of 320 etymological entries in his work, which he relates to Korean, Middle Korean, Japanese, Old Japanese, but also to members of the Altaic family (consisting of Turkic, Mongolic, Tungusic), Ainu and others.

His seminal work advanced the comparison of Japanese with languages from the Korean peninsula greatly and gave rise to the Altaic theory, where Japanese and Korean are incorporated in the Altaic language family. The Altaic theory was chiefly developed by Roy Andrew Miller based on works on the Altaic languages by Ramstedt (1912) and Poppe (1960) in 1971 and was a major breakthrough in relating the Altaic language family with Japanese (Miller 2003:201). By applying the comparative method, Miller created a substantial list of lexical items that was trying to relate Japanese to the Altaic language family.

Miller was also inspired by Japanese linguist Murayama Shichirō, also a scholar of the Altaic languages, who critically reviewed Miller's book after publication (Murayama 1972). Despite his criticism, Murayama still regarded Miller's work as having a "major scientific significance" (Murayama 1972:467). Along with Ōbayashi Taryō (Murayama and Ōbayashi 1973), Murayama published another monograph on the connections between Japanese and the Altaic language family. Murayama incorporated the views of Soviet Japanologist E. D. Polivanov of a Malayo-Polynesian substratum in the Japanese language in addition the Altaic elements. His work, in turn, was reviewed by Miller (1974), who in principle commended Murayama's contribution to the Altaic theory, but was very skeptical (if not dismissive) of a Malayo-Polynesian substratum and the

subsequent view of Japanese as a ‘hybrid’ with Altaic and Malayo-Polynesian elements as proposed by Polivanov and Murayama, stating it is “somewhat premature to introduce such frankly speculative elements into the consideration of these already complex problems” (Miller 1974:102).

Another monumental publication arguing for an Altaic-Japanese connection is that of Russian historical linguist and philologist Sergei Starostin (1991). He compares lexical items based on a Swadesh-list subdivided into a 35-word list of core vocabulary thought to be less susceptible to borrowing, as well as a 65-word list that is more likely to be borrowed. He assumed that a genetic language relationship is likely, if the percentage of cognates in the 35-word list is higher than in the 65-word list. In response, Bernard Comrie comments that Starostin “sets high standards for the evaluation of [a] putative genetic relation. Whether his conclusions meet these high standards is less clear to me” (Comrie 1993:832). In subsequent years, the connection of Japanese with the Altaic languages was advanced with the publication of the 2003 *Etymological Dictionary of the Altaic Languages* (Starostin, Dybo and Mudrak 2003).

Following this, Martine Robbeets further developed the Altaic theory (2004; 2008). After screening a set of 2005 lexical items, she found 359 lexical etymologies that show a “regular phonological fit for the initial consonant, the medial vowel and the medial consonant of the Japanese entry,” which led her to believe that the relationship between Japanese and the Altaic languages is genetic (Robbeets 2005:422). She later added comparisons of verbal morphology to strengthen her arguments (Robbeets 2007).

The Altaic hypothesis was critically reviewed since its introduction. Early skepticism goes back to Gerhard Doerfer (1974), J. Marshall Unger (1990), Juha Janhunen (1992; 1994) and Georg *et al.* (1999), among others. Although himself an early proponent of the Altaic hypothesis (Vovin 1999), Vovin was among the most vehement critics of the theory after the turn of the century and heavily criticized the *Etymological Dictionary of the Altaic Languages*, stating that “scholarly-wise it is completely useless” (Vovin 2009:141).

Incorporating the Japanese language into the larger Altaic language group has proven difficult in research. Some scholars focused solely on the relationship between Korean and Japanese, following the theory proposed by Martin in 1966. One publication that had a major influence on the study of both languages was the dissertation by John B. Whitman in 1985. Whitman expanded the list of etymologies connection Korean and Japanese from Martin and also crucially suggested vowel-length distinction and other phonological rules.

According to Marshall J. Unger, a proto-Korean-Japanese language developed on the Korean peninsula and migrated to the Japanese islands around the third century BCE, splitting in what would later become Korean and Japanese (Unger 2001:247; 2003; 2009).



While Unger's research was generally well received by Whitman (2010), Vovin's monograph (2010) published almost at the same time holds a very different opinion. According to him, the similarities of Korean and Japanese cannot be explained by a genetic relationship of the two languages, but rather by intense contact that led to heavy borrowing and therefore Vovin disregards the Koreo-Japonic hypothesis (Vovin 2010:3). Despite close lexical similarities, Vovin points out some fundamental typological differences, for example that historically, Korean is an ergative language while Japanese is nominative. In addition to that, the Korean passive seems to be quite young, having developed from a causative construction, as well as ablaut, which is still active in Korean color terms and onomatopoeic words. He concludes that this "suggests [...] convergence, not divergence" (Vovin 2010:6–7).

### 2.3. Koguryōic

Another important theory, put forward in 2004 by Christopher I. Beckwith, is that of a relationship with the language of the kingdom of Koguryō in the north of the Korean peninsula. The theory is mainly based on glossed toponyms recorded in the *Samguk Sagi*, which Beckwith used to compile a list of glossed words and grammatical morphemes that can be identified as belonging to the Koguryō language. In his research, he found that 20 entries refer to Archaic Koguryō (3<sup>rd</sup> century CE) and 119 entries are from Old Koguryō (probably recorded in the 8<sup>th</sup> century CE) (Beckwith 2004:2). Beckwith criticizes both Unger and Vovin for their views, stating that "[t]he fundamental problem Unger and Vovin continue to overlook is that, with one or two exceptions due to the Puyo-Koguryo peoples having overrun most of the region during their initial expansion, there are no Japanese-related toponyms from the southeastern part of the Korean Peninsula." On the contrary, "Korean toponyms are found only in the southern Korean Peninsula, especially the southeastern part (Silla) – precisely the region Unger and Vovin claim was Proto-Japanese speaking – and to some extent also in Paekche. These simple facts falsify Unger and Vovin's assertions concerning the identity of the Japanese-related language recorded in sources on the Korean Peninsula region" (Beckwith 2010:216). His publication was criticized by Unger, who calls into question whether the toponyms recorded by Beckwith can even be considered to depict the Koguryō language. He thus concludes that "it could be that Koguryōan was just a variety of Old Korean and that the place-names merely preserve the vestiges of a dying para-Japanese" (Unger 2009:81–82).

## 2.4. Austronesian

I will now turn towards theories for the origins of the Japanese language that assume the origins of the Japanese language to the south, the most prominent of which is the Austronesian hypothesis.

A language relationship between Japanese and Austronesian was first mentioned by Shinmura Izuru in 1911 and Soviet Linguist E. D. Polivanov in 1924 (Hudson 1999:267). It should be noted here that most scholars who argue for a genetic relationship with Austronesian consider Japanese as being composed of Austronesian as well as elements from other languages, usually from the Korean peninsula (see Murayama 1976).

The theory of a relationship with the Austronesian languages received attention after the publication of Ōno Susumu in 1957. According to Ōno, an Austronesian language was present in the Japanese archipelago before the language of the Yayoi immigrants came to the Japanese islands. The Austronesian language remained as a substratum in the newly formed language. Ōno compares the Austronesian influence on Japanese to that of Celtic in the formation of the French language (Ōno 1970:70), but never tried to validate his claims.

Following this Ōno's publications, Kawamoto Takao (1977) devised an extensive word list consisting of a total of 721 possible Japanese and Austronesian cognate pairs. Following Kawamoto's research, Paul K. Benedict published a monograph relating Japanese to the Austro-Tai language branch in 1990. He did not fully agree with Kawamoto, stating that Kawamoto records "‘look-alikes’ rather than cognate sets" (Benedict 1990:2) and instead proposed an 'Austro-Japanese' language family consisting of Austronesian and Japanese-Ryukyuan as part of his Austro-Tai macrofamily. He did not consider any linguistic influence from the Korean peninsula for the etymologies and cognate sets in his research.

Robert Blust, a historical linguist specializing in Austronesian languages, opposed such views and pointed out about the lexical items in Kawamoto's work that "virtually every etymology is problematic in one or more ways" (Blust 2013:704; 2014:306–309). Similarly, Benedict's work also critically reviewed by Blust (2013:704–705, 707–710), Vovin (Vovin 1994:385) and Unger (Unger 2001:83).

David Solnit compared the reconstructions of Benedict with that of Sergei Starostin mentioned earlier and found that 22% of the cognates of both studies are competing (e.g. were present in both studies as cognates with Altaic as well as Austronesian), 30% were Austronesian cognates and 39% were Altaic cognates with 9% missing altogether. According to Solnit, this seems "to mirror the notion of co-existing Austronesian and Altaic strata in the Japanese lexicon" (Solnit 1992:194).

On the account of archaeological research, a connection of the Austronesian speakers and the Japanese islands seems to be confined only to the southernmost islands of the Ryūkyū islands, Yaeyama, Yonaguni and Miyako. Summerhayes and Anderson (2009) as well as Mark Hudson (2012) have shown that the gap of roughly 300 kilometers between these southern Ryūkyū islands and Okinawa has not been overcome and cultural Austronesian influence is restricted to the Sakishima islands. Hudson claims that “[t]he Sakishima islands of the southern Ryukyus were settled around 4300 years ago by a quite different group of people(s) who seem to have come not from Japan, but from somewhere in Taiwan and/or Southeast Asia” and proceeds to assert that “the archaeological record offers no evidence for the movement of people or artefacts across the gap between Okinawa and Miyako Islands and it is widely assumed that this marks the boundary between two different cultural zones” (Hudson 2012:258–259).

## 2.5. Mixed language

Murayama Shichirō has argued for a mixed language origin of the Japanese language, consisting of a Malayo-Polynesian and an Altaic-Tungus component (Murayama and Ōbayashi 1973). He explains the Malayo-Polynesian element in the language as the nucleus and disregards the explanation of these elements as loanwords (Murayama 1976:418–419). Contrary to that, Wang and Ogura argue against a mixed Altaic-Austronesian origin and Austronesian substrate by assuming “borrowing of non-basic vocabulary from Austronesian” (Wang and Ogura 1996:325).

More recent publications from Japanese scholars include Japanese linguist Itabashi Yoshizō, who assumes that Old Japanese has some basic vocabulary and parts of the grammar from Austronesian, while the rest is of Altaic origin (Itabashi 1999:54–55; 2003). In 2015, Itabashi postulated that the Jōmon language came to Japan from the south, then spread to the north and finally turned into a mixed language with elements from Austronesian, Hmong-Mien languages, Chinese, Korean and the language of Koguryō (Itabashi 2015:52).

A similar idea is advocated by Sakiyama Osamu, who inferred that rice came to Japan before the Yayoi period by examining the distribution of rice and the word for it in the Japanese islands (Sakiyama 2012:390). According to his theory, rice agriculture was brought to Japan by a group of sailors that originated in the southern Chinese mainland, who came to Taiwan around 4.000 BCE and started spreading south around 3.000 BCE, founding the Malayo-Polynesian language (Sakiyama 2012:356).

## 2.6. Japonic proto-language and Ryūkyūan

Another promising approach for solving the question of the origins of the Japanese language is the reconstruction of a Japanese proto-language, which was first undertaken by Samuel Martin in 1987. It is the. Based on this first comprehensive reconstruction of proto-Japanese phonology and lexicon by Martin, Bjarke Frellesvig and John Whitman published the edited volume *Proto-Japanese: Issues and prospects* in 2008, which focuses on reconstruction of the basic phoneme inventory of proto-Japanese and makes use of dialects to reconstruct accent and the reconstruction of morphology and syntax. Leon Serafim (2008:98) raised the following unanswered question: “Did Japanese enter the Ryukyus from Japan proper, or did it spread from the Ryukyus to Japan proper?” This shows the crucial position of Ryūkyūan for the question of the origins of Japanese.

However, a good reconstruction of Proto-Japonic hinges on the advancement of research on the Ryūkyū languages. The first attempt at reconstructing a proto-Ryūkyūan language was the dissertation of Maner Thorpe in 1983, in which Thorpe recorded a total of 267 cognate sets from Ryūkyūan dialect data. John Bentley (2008a) revisited Thorpe’s reconstructions and added his own detailed study of the southern-most Ryūkyū islands, reconstructing from the island’s dialects the proto-language he calls proto-Sakishima, which comprises proto-Miyako, proto-Yaeyama, proto-Yonaguni. Bentley’s work enhances that of Thorpe and provides a list of 505 proto-Sakishima words.

Bentley’s work was critically reviewed by Thomas Pellard, who specializes in Ryūkyūan languages. Although in need of “major revisions,” Pellard evaluated the book as a “welcome advance in Ryukyuan and Japonic historical linguistics” and a “very useful handbook to scholars of Ryukyuan” (Pellard 2010:175). Furthermore, he stated about the importance of research on the Ryūkyūan languages that it “is now also widely accepted that Ryukyuan preserves several features already lost in Old Japanese and that a careful look at Ryukyuan can greatly enhance our understanding of earlier Japonic” (Pellard 2010:170).

## 2.7. Minor theories

Other theories worth mentioning include the later works of Ōno Susumu (1980, 1989), who connected the Japanese languages to the Dravidian language branch and was extensively studying the Tamil language. Roy Andrew Miller criticized Ōno’s proposed connection with the Dravidian languages, stating that Ōno’s works include “hundreds of alleged Japanese linguistic forms that are entirely imaginary. [...] The scandal of these hundreds of spurious pseudo-forms in Ōno’s books and papers is now well known in Japan, where even philologically untrained readers of his

many articles published in daily newspapers are in a position to give the lie to his arguments” (Miller 1986:558).

Ann Kumar has tried to connect Japanese to the Indonesian islands, focusing on the Javanese language (Kumar 2009). Her approach was heavily criticized by John Bentley, who stated that the linguistic evidence presented is “heavily flawed” (Bentley 2011:159). Kumar in turn rebutted Bentley’s criticism in 2013 by saying that “[n]one of this, of course, can affect the strength of the evidence presented” (Kumar 2013:515).

## **2.8. Conclusion**

In this chapter I have shown that there are many differing opinions on languages that could possibly be related to Japanese. It is therefore not possible to answer the question of the origins of the Japanese language with the information provided so far.

The Japanese language seems to have been influenced from the Korean peninsula as well as from the south, but the exact relationship with old languages from the Korean peninsula is still debated. Meticulous examination of the known Japonic languages and their dialects might help in answering those questions in future research. Promising areas of research are the reconstruction of the Japanese pitch accent system as well as research on the Ryūkyū islands. Another important source of archaeological data on the kingdom of Koguryō is research in North Korea. This is unfortunately not available for research at present, but hopefully will be made accessible in the future.

### 3. Genealogy

Genealogy provides information that allows research to determine the stock of people that were living in a certain area in prehistoric times. Although language is not a trait of humans that is passed on to future generations through genes, successfully connecting the genes of a people with a certain language can be of great importance in tracing languages through time. This is especially useful for languages that were spoken in geographically confined areas such as islands where little to no external language influence occurs. If external language influence can be excluded through genetics, the language of a people is likely to correspond with their DNA. Lansing *et al.* compared the association between languages and genetic clades with cophylogenies in ecology. This enabled them to calculate “host switching” probabilities, which “refers to movements of parasites between host species. Here, the hosts are people and languages are the parasites.” The study found that there is a strong association between languages and genes if host switching probabilities are low. Those probabilities are influenced by the kinship structures of social communities (Lansing *et al.* 2017:12914).

Hanihara Kazurō (1991) has suggested a ‘dual structure model’ for the population history of Japan which postulates that the first occupants of Japan, the Jōmon people, gradually intermixed with later immigrants from the Korean peninsula with the start of the Yayoi period.

This view is also reinforced by a model developed by Nakagome *et al.* (2015). Their study used data from Ainu people, who are thought to be direct descendants of the Jōmon people and a Beijing Chinese sample considered to have the same ancestry as Yayoi people “by approximate Bayesian computation using genome-wide single nucleotide polymorphism (gW SNP) data.” It was found that the hybridization model proposed by Hanihara is “between 29 and 63 times more likely than the replacement and transformation models” (Nakagome *et al.* 2015:1533). According to the research of Nakagome *et al.*, “initial divergence between the Ainu and Beijing group was dated to approximately 20,000 years ago, whereas evidence of genetic mixing occurred 5,000–7,000 years ago, older than estimates from the archaeological records, probably due to the effect of a further subpopulation structure of the Jomon people” (Caspermeyer 2015:1913).

Adding to this, Jinam, Kanzawa-Kiriyama and Saitō also state that genetic data is in accordance with the ‘dual structure model’. However, according to their research, the “indigenous Ainu and Ryukyuan populations retain a genetic identity that most likely traces back to Jomon ancestors, while at the same time show indications of recent admixture with the Hondo Japanese” (Jinam, Kanzawa-Kiriyama and Saitō 2015:151).

It is very important to understand what this intermixing process looked like to determine whether the language of the Japanese archipelago was already present during the Jōmon period or

whether it arrived there with the Yayoi immigrants. This leaves in principle three options for the transition phase between the Jōmon and Yayoi periods: (1) The language of the Yayoi people is the ancestor of Japanese and was brought to the Japanese islands during the Yayoi period; (2) The language ancestral to Japanese was already spoken during the Jōmon period and was not replaced by the language of the Yayoi immigrant people; or (3) Japanese is a mixed language consisting of elements from the Jōmon and Yayoi languages.

A change of language is only expected when a different language family extends its geographical reach to a new area. In the case of immigrant peoples intermixing with the native population, the prevailing language is mainly determined by the percentage of speakers of the immigrant language and the social structure of both communities (Forster and Renfrew 2011; Lansing *et al.* 2017).

Research has shown that even small waves of immigrants can change the language of a whole population. Forster and Renfrew investigated areas in New Guinea with Malayo-Polynesian male Y-chromosome DNA and found that a percentage of 10 to 20% correlates with the presence of Malayo-Polynesian languages, while areas with lower Malayo-Polynesian Y-chromosome DNA speak Melanesian. The mtDNA is similar in areas with Malayo-Polynesian as well as Melanesian languages (Forster and Renfrew 2011:1391).

This is true for patrilocal societies, meaning that women leave their communities at marriage and raise their children in the community of the father, who's language the children will learn. Research has also shown that those communities will remain a monolingual speech community and the women's tongues will not be used (Lansing *et al.* 2017:12914). In matrilocal communities, however, this is different:

When women remain in their natal communities and men disperse (matrilocal), language transmission is channeled through women, and children will learn the community language of their mothers. In this case, if men often marry outside the radius of their mother's speech community, language might be expected to correlate with the maternally inherited mitochondrial DNA (mtDNA), but not with the paternally inherited Y chromosome (Y). Conversely, if men stay in their natal community and women disperse (patrilocal), the opposite pattern should hold. (Lansing *et al.* 2017:12910)

Therefore, the nondispersing sex seems to determine the genes and languages of a speech community (Lansing *et al.* 2017:12912). This means that understanding the DNA of prehistoric Japan will likely provide an indication as to what this transition process may have been like and what effect it had on the languages spoken during that time.

### 3.1. Mitochondrial DNA

As shown in the previous section, the relationship between female and male DNA can give information about the language transmission in ancient times as well as point to the social structure of speech communities. Therefore, it will be important to analyze ancient DNA of the Japanese archipelago for the male and female lineages.

The composition of modern Japanese DNA shows influence of diverse populations over the course of time. To better understand the prehistory of Japan, Skeletons from the Jōmon period have been analyzed and mitochondrial DNA was extracted. With this data, the proportion of Jōmon DNA in Modern Japanese people can be approximated.

Figure 1 gives an overview of DNA in Japan as well as surrounding areas. Sub-haplogroup levels are not shown for the sake of brevity and illustration purposes. The data for Yayoi DNA is an estimation based on a graph provided by Shinoda Ken'ichi (2016:33). The remaining data stem from Adachi *et al.* (2014:412) and Kanzawa-Kiriyama *et al.* (2013:102). Note that for the data on Okinawa, “haplogroups D4h2, G1b, C, and E cannot be identified mainly from the absence of the control region data. Therefore, the frequency of these haplogroups was omitted” (Adachi *et al.* 2014:412, note c).

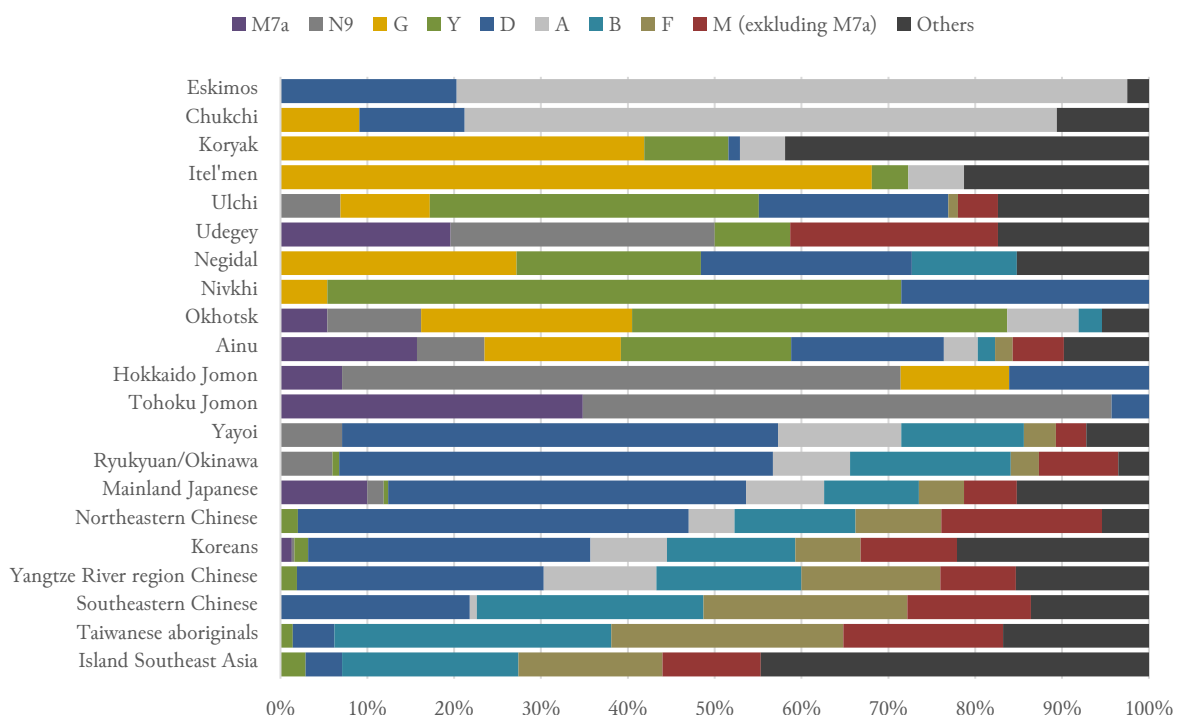


Figure 1: Simplified chart of selected mtDNA haplogroup frequencies



The two most prominent Jōmon type haplogroups are N9b and M7a, which was shown by a study on Hokkaidō Jōmon skeletons (Adachi *et al.* 2009). Haplogroup D4 is also present in other Jōmon period samples from the Tōhoku area (Kanzawa-Kiriyama *et al.* 2013:102) and has also been found in a skeleton excavated at Yugura cave site in Nagano which was dated to 7.920–7.795 BP by direct <sup>14</sup>C dating (Adachi *et al.* 2013:137).

Comparing the samples from Hokkaidō and Tōhoku also revealed that “they lack shared haplogroups at the sub-haplogroup level (M7a\*, D4h2, and G1b of the Hokkaido Jomon were not seen in the Tohoku Jomon, and N9b2 and D4b of the Tohoku Jomon were not seen in the Hokkaido Jomon),” possibly signifying a relatively low degree of gene flow during the Jōmon period (Kanzawa-Kiriyama *et al.* 2013:98).

Allocating the haplogroups of Modern Japanese populations should give an indication as to how many Yayoi immigrants came to the Japanese archipelago and how much of the ancient Jōmon DNA was retained in the process. Migratory movements can also be inferred by comparing these findings with DNA samples from around Japan (see Figure 2).



Figure 2: Location of DNA samples (Adachi *et al.* 2014:409)

From the data provided in Figure 1 it is clear that haplogroups M7a and N9b correspond to Jōmon DNA. D4 seems to have already been present in Japan during the Jōmon period but was also part of the gene mix the Yayoi immigrants brought to Japan. Haplogroup D appears to be related to immigration from the north, as is haplogroup Y as both are found in Hokkaidō Jōmon samples and those of the Nivkh population in Sakhalin. Both groups make up about 35% of Ainu DNA and are not found in large quantities in Japanese DNA samples outside of Hokkaidō.

The Ryūkyūan data also seems to be very similar to mainland Japanese. However, since not all haplogroups could be tested for the Ryūkyū sample, the data is not reliable enough to make

any assertions. Tanaka *et al.* analyze the ancient mtDNA through population and phylogeographic methods as follows:

This global picture is congruent with an important influence on mainland Japanese from northern Asian populations through Korea, that the Ryukyans had a dual northern and southern Asian background previous to the new northern influences acquired by admixture with mainland Japanese, and that the Ainu represent the most isolated group in Japan in spite of the genetic input received from Kamchatka. Also noticeable is the great distance and low identity values obtained for the Ainu–Ryukyuan pair compared with those obtained in their respective comparison to mainland Japanese, which is another hint of its notable maternal isolation. (Tanaka *et al.* 2004:1843)

I believe that the data presented above indicates that most of the modern Japanese mtDNA relates to immigrant Yayoi populations which are genetically closely related to Korean and Chinese. A considerably smaller portion of the mtDNA is made up of Jōmon DNA. Further research on the dispersal of the haplogroup D (and its subgroups) is necessary to better understand the exact share of Jōmon mtDNA in modern Japanese DNA. At least one third of the mtDNA of the Ainu people in the north of Japan likely corresponds to immigration from the north after the Jōmon period.

### 3.2. Y-DNA Haplogroups

In this section I will consider the male Y-DNA and show its relation to the female mtDNA. It will be interesting to see where the DNA data corresponds with each other and which differences can be shown. This will allow us to get a better understanding on the prehistory of Japan and its inhabitants. For this, I will present DNA data from recent studies focusing on Japan, Korea, China and Southeast Asia. The main Y-DNA haplogroups to be considered here are C with the subgroups C1 and C2, D2, N and O with the subgroups O1, O2, O2b and O3. I will first try to detect the areas where those haplogroups are centered and the connection to those populations. The main migration movements are shown in Figure 3.



Figure 3: Migration of the major Y-DNA haplogroups. Dotted and dashed lines display alternative routes of migration (from Wang and Li 2013:4)

In Figure 4 I adapted Y-DNA data from and Kim *et al.* (2011:5) and Nonaka, Minaguchi and Takezaki (2007:493) to show frequencies among several populations. An asterisk (\*) next to the letter of the haplogroup denotes all the subgroups of that haplogroup excluding those individually shown in the graph. For example, C\* means all subgroups of haplogroup C excluding C1, which is shown individually in the graph.

It is thought that haplogroup D2<sup>4</sup> corresponds with the ancient Jōmon DNA and the distribution in Japan is similar to the mtDNA. Within the Japanese archipelago, haplogroup D2 is found in relatively low frequencies in Kyūshū, where the Yayoi immigrants first arrived. It is found in relatively high frequencies in northern Japan with data from Asahikawa in Hokkaidō showing a share of about two thirds of modern Japanese DNA. It is also considerably high in the Ryūkyū islands with data from Okinawa showing a share of about 40%.

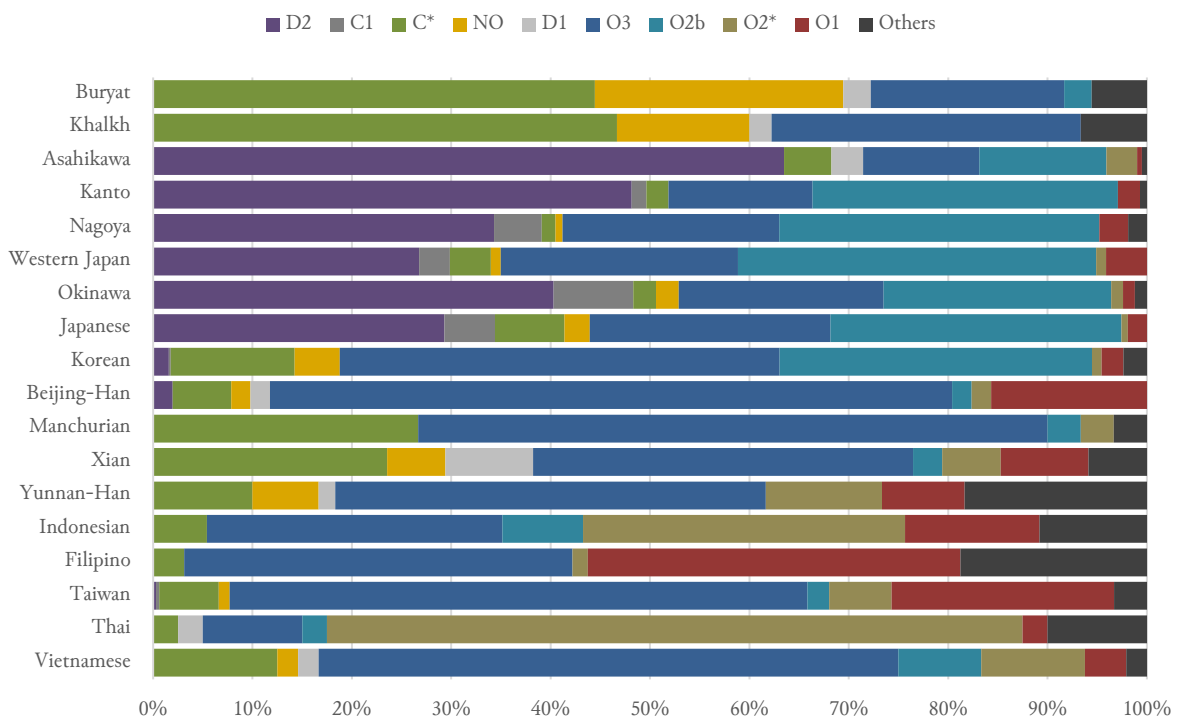


Figure 4: Simplified chart of selected Y-DNA haplogroup frequencies

Haplogroup C1 accounts for 8,0% of the Okinawan Y-DNA, the highest percentage found in East Asia. This is interesting because of two reasons. Firstly, it is completely absent from the data of Asahikawa in the north and therefore seems not to be part of the Jōmon DNA prevalent there. Secondly, it is also not found in the Korean DNA data, suggesting that it cannot be connected to the Yayoi migration either. It is also not present in areas around Japan, which makes its

<sup>4</sup> Also found on the Andaman Islands off the coast of Myanmar and in low frequencies in Tibet.

origins even more difficult to understand. It appears likely that haplogroup C1 entered Japan through the Ryūkyū islands from the south, based on the fact that it is found in highest frequencies in the south of Japan. This view of a southern origin also agrees with research on the origin of haplogroup C<sup>5</sup>. Malyarchuk *et al.* state that the haplogroup C clad is “generally accepted [...] of South-East Asian or Indian origin” (Malyarchuk *et al.* 2010:539).

As haplogroup C1 is not found in populations of the Korean peninsula, it may have arrived during the Jōmon period as a separate migration movement that occurred after haplogroup D2 was introduced to the archipelago. Dating estimates given by Hammer *et al.* suggest that the “D lineage has a coalescence time of -19,400 years, with an expansion that started -12,600 years ago”. In comparison to this, the “coalescent time of haplogroup C-M8 is estimated to be -14,500 years ago, with evidence for population expansion starting -10,820 years ago” (Hammer *et al.* 2006:54–55)<sup>6</sup>. However, this represents only a very rough estimate based on a population simulation conducted by Koyama Shūzō (1984) and should be used with caution. Further research on the presence of haplogroup C1 in the Japanese archipelago needs to be undertaken to fully understand its importance for the prehistory of Japan.

If further research were to show that the percentage of haplogroup C1 in relation to the remaining Jōmon DNA was within the 10–20% margin outlined by Forster and Renfrew (2011:1391), this could also indicate a possible language shift related to a migration movement connected with haplogroup C1. If this could be proven, it would suggest that the language of the native Jōmon population in the Ryūkyū islands, western Japan and central Japan, extending to the Kansai area, could have been replaced by an immigrant population from the south during the Jōmon period which is connected to haplogroup C1.

In contrast to haplogroup C1, the second subgroup C2 present in East Asian populations has an estimated dispersal time of 9.900 BCE  $\pm$  4.800 years (Karafet *et al.* 2002:784). This haplogroup is mainly found in East Asia (including Mongolia) and Siberia but is also present in Korean and Chinese samples. The distribution of haplogroup C1 in Japan is highest in Asahikawa, Hokkaidō with 4,8%, followed by western Japan with 4,1%, with Nagoya (1,4%), Kantō (2,2%) and Okinawa (2,3%). This suggests that haplogroup C2 entered Japan from Korea as well as from the north.

Unlike the mtDNA data presented above, the Y-DNA data does not show any major migration movements from the north and south after the Jōmon period. Haplogroup NO which is

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<sup>5</sup> Haplogroup C1 is a subgroup of haplogroup C.

<sup>6</sup> Haplogroups C-M8 refers to haplogroup C1 in a different naming scheme.

mainly found in northern Eurasia (Wang and Li 2013:3) seems not to have entered Japan from the north, since it is not present in the Hokkaidō samples. Likewise, haplogroup O1, which is often found in populations of Austronesian speakers, is low in Japan (1,9%) and likely came with the Yayoi settlers from the Korean peninsula, given that it is also found in Korean DNA samples.

I would now like to briefly explore the possibilities of an immigration movement from the south during the Jōmon period, predating the spread of Austronesian speakers from Taiwan across the Pacific Ocean. Such a migratory movement should have included a people characterized by Jōmon DNA with the haplogroups D2 and C1.

Austronesian speakers are thought to originate in central and southern China from where speakers of Proto-Austronesian spread to Taiwan by around 4.000 BCE (Bellwood 2006:103). Their homeland was possibly around the southern Chinese province Guangdong (near Hong Kong), where the Daic people are from (Li *et al.* 2008).

Other researchers also suggest the possibility of an even earlier migration to Taiwan, possibly around 5.000 BCE (Zheng *et al.* 2011:2) or 6.000 BCE (Mirabal *et al.* 2013:551). This might have followed a rapid rise of sea level around 7.000 BCE and a warming of the climate (Yasuda 2008:504–505). Austronesians practiced agriculture and had rice and were therefore able to reach population densities larger than that of a hunter gatherer society (Blust 1996:31).

It is possible that the population living in and around Taiwan could have moved to the Japanese islands before the Proto-Austronesian speakers settled in Taiwan. Both the Austronesian and the Daic languages are thought to have evolved from the Austro-Tai language family (Umeda 2004:36).

DNA data from ancient populations of the Austro-Tai language family may support new information that help understand the language dispersion from southern China and possible connections to languages spoken in the Japanese archipelago during the Jōmon or Yayoi periods. There are several features of the Jōmon people that are thought to be similar to that of southern China. Tooth ablation and face-tattooing (found in Ainu populations) are two of the features that are talked about most often (Kidder 2007:68, 113; Yamada 2009:321; Kosut 2015:34). Roger Blench also records those features for the the southern Chinese Daic (Tai-Kadai) and Austronesian language speakers, which he connects with the Yue people that are mentioned in Chinese records. They are also referred to as the Baiyue 百越 (Hundred Yue) which refers to “a complex of loosely-related ethnic groups which inhabited broad areas of southern China” (Blench 2013:7–10).

### 3.3. Language transfer during the Jōmon-Yayoi transition

The question that needs to be considered is whether the Japonic languages arrived during the Yayoi period or were already present in Japan during the Jōmon period. Direct evidence on the languages of the Jōmon period is not available, but if the Jōmon and Yayoi people did intermix at the beginning of the Yayoi period, it may be possible that some elements of the Jōmon language are contained in modern Japanese. However, it is important to know what the language of the Yayoi immigrants looked like before they entered Kyūshū and what possible language family the Jōmon language of northern Japan belonged to. By doing that, it may be possible to detect non-Yayoi language features of modern Japanese.

One possibility of a Jōmon language can be found in the Emishi people 蝦夷 who were living to the east of the Yamato court (in present-day Kansai area) and are recorded from at least the 5<sup>th</sup> century CE as ‘hairy men’ 毛人 (SOS 95; De Bary *et al.* 2001:9). The Emishi people are thought to be ancestors of the Ainu people of Hokkaidō in northern Japan (Lewin 1965:307). Evidence for this comes from place names of northern Japan that are linked to the Ainu language (Friday 1997:4). It is thought that the Yamato people slowly gained control over the Emishi lands to their east and reached the Kantō area in the 5<sup>th</sup> century CE (Kojima 2009:3; Lewin 1965:304).

According to Gina Barnes, the Emishi people are connected to the Jōmon period through their genealogy and the term Emishi was not used as an ethnonym in old sources from the Nara period (710–794 CE), but simply labeled these people as ‘outsider.’ Subsequently, this term changed to Ezo in the 12<sup>th</sup> century CE, coinciding with the appearance of the material culture record of the Ainu people, whose Jōmon-DNA shows intermixture with that of the Okhotsk peoples from the north. The ethnonym Ainu, which means ‘human’ in the Ainu language, first appears in written records from the 17<sup>th</sup> century CE (Barnes 2015:283–284)<sup>7</sup>. Connecting the Emishi people and the Ainu people through genetics helps place the Emishi language in the Ainu language family and provides a glimpse into languages that may have been present on the Japanese archipelago during the Jōmon period. Place names related to the Ainu language are found from the city of Sendai northward (Barnes 2015:284).

In order to understand the historical development of the Japonic language family and a possible influence of the Jōmon languages, it is important to determine the Jōmon language that was spoken in northern Kyūshū, the area that was first settled by immigrants from the Korean peninsula in the Yayoi period. The fact that toponyms related to Ainu are not found in that area can be interpreted to mean that the Jōmon people of northern Kyūshū spoke a language different

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<sup>7</sup> For Japanese research see for example Kojima (2009) and Hokkaidō Daigaku. Ainu Senjūmin Kenkyū Sentā (2010).

from the Ainu language family. However, only because no toponyms remain we should not automatically infer that no toponyms existed during the start of the Yayoi period. As the Ainu language family seems to have been present during the Jōmon period, this would be a preliminary hypothesis for the language of the Jōmon people of northern Kyūshū. Falsifying this hypothesis can open up new possibilities for the search of the Jōmon language that the Yayoi people encountered after their arrival in the Japanese archipelago.

It may be doubted that the Jōmon populations were a homogenous people spreading from the Ryūkyū islands in the south to Hokkaidō in the north. Research based on food processing during the final Jōmon period has found that there were differences between western Japan and eastern Japan, with the border being roughly around the Kansai area:

In western Japan, there is scarce evidence of food consumption in the settlements, while storage pits, wet-type storage pits were distributed. [...] In the Late and Final Jōmon sites in eastern Japan, the evidence of food consumption increased, such as large fire features, large and simple vessels, charcoal and fragmented animal bones which were usually uncovered in small fragmented pieces, some well burned. [...] However, it is unlikely that this increase of food consumption was caused by population growth. [...] [C]onsidering the increase of food consumption after the Late Jōmon, feasting could be an alternative scenario [...]. In contrast to the situation of western Japan after the Late Jōmon, with no food processing facilities and small settlements, eastern Jōmon settlements seem more sedentary. (Kawashima 2016:21)

Takahashi Ryūzaburō points out that feasting declined in western Japan after rice cultivation was introduced and Jōmon rituals of ancestor worship were replaced with new rituals and ideologies of the Yayoi elite (Takahashi 2009:88, 91). It is possible that there were at least two different groups of people during the Jōmon period based on how they interacted with immigrants from the Korean peninsula. Jōmon people to the west in the Kyūshū, Chūgoku and Kinki regions quickly adopted rice cultivation, while people in the east were slower to adapt this new technology (Takahashi 2009:71). If the Jōmon people of western Japan were indeed distinct from those in eastern Japan, they may have also spoken a different language.

Other remains of a Jōmon language may also be found in the south of Japan. Historical sources speak of peoples from southern Kyūshū called Kumaso and Hayato, who were opposing the ruling Wa elite and lived mainly in mountainous terrain unsuited for wet-rice cultivation. Unfortunately, there is not enough language data about their language to decide whether they were speaking a Jōmon language or did in fact come to Japan during the Yayoi period. In the past, research has tried to connect the language of the Hayato people to the Ryūkyūan language and hence with the Japonic languages family. However, a common opinion has yet to be reached among researchers (Serafim 2003:463). For a more detailed description of the Kumaso and Hayato people, see section 8.1.2 and 8.1.3.

Modern data on the Ryūkyūan dialects may help understand the prehistory of the language of the Ryūkyū islands. The questions of when and from where the Ryūkyūan languages spread to the islands has not yet been conclusively answered. Leon A. Serafim states that “both positions have been taken, but all current evidence points to Japanese entering the Ryukyus from Japan proper. It is widely thought that Japanese language entered Japan from the Korean peninsula together with the carriers of the Yayoi culture” (Serafim 2008:98). This means that the Ryūkyū languages likely also came from the Korean peninsula and separated from the mainland Japanese languages after the start of the Yayoi period. The languages of the Ryūkyū islands are very valuable for researching the language history of the Japonic languages because they preserve archaic language features not found in mainland Japanese anymore (Pellard 2011:59) and can therefore provide a more defined picture of the language of the first Yayoi immigrants. If Serafim is correct in assuming that the Ryūkyūan languages came during the Yayoi period, it is unlikely that it would have been present in the Japanese islands during the Jōmon period.



## 4. Chinese sources

In order to understand the context of various sources on the origins of the Japonic language, it is important to have a thorough understanding of the earliest speakers of those languages known through textual evidence. By researching the culture and livelihood of the Japonic speakers, it will be much easier to trace their origins back through time.

This chapter will provide a good basis for contextualizing the information from other research areas presented in the following chapters and is therefore essential for this research project. I will try to focus on primary sources wherever possible and give a brief but comprehensive overview of the prehistory of the Japanese archipelago and the Korean peninsula.

### 4.1. The Wa and their language

Ancient Chinese sources refer to the inhabitants of the Japanese islands as Wa people who are usually considered to be the ancestors of the Japanese people. In this chapter I will try to outline the earliest evidence of their language and show connections to Old Japanese.

The first information on the language the Wa people spoke can be found in the 3<sup>rd</sup> century *Records of the Three Kingdoms* (hereafter *SGZ*). In a section generally known as *Gishi-Wajinden* (hereafter *GWJ*), it records 16 titles, 29 place names and 6 personal names of the Wa language. A few place names can be linked to contemporary places in northern Kyūshū: Tsushima (對馬 \*tuəs-ma<sup>8</sup>), Iki (一支 \*ʔit-kie<sup>9</sup>), Matsura (末廬 \*mat-lɔ) and Ito(shima) (伊都 \*ʔi-tɔ<sup>10</sup>). Other recorded place names possibly show some difficulties Chinese scribes had when transcribing the language of the Wa people: The two toponyms 斯馬 \*sie-ma and 邪馬 \*ja-ma might not actually be place names but simply refer to the Modern Japanese nouns *shima* ‘island’ and *yama* ‘mountain’. This would in principle suggest that the language of the Wa is related to Japanese, although linguistic material is sparse.

Additional data can be extracted from the titles that were recorded (see Table 1). I believe that at least three titles can be connected to Old Japanese titles: *piko* (‘prince,’ 卑狗 \*pie-ko), *mori* (‘guard,’ 母離 \*mə-liai) and *wake* (‘lord,’ 獲支 \*yuak-kie)<sup>11</sup>.

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<sup>8</sup> Transcriptions based on Later Han Chinese provided by Schuessler (2009).

<sup>9</sup> Written as 一大 in the original, but probably a misspelling for 一支, as it is clear from the records that it refers to *Iki-no-shima* 壱岐島.

<sup>10</sup> Associated with Hirabaru site (*Hirabaru iseki* 平原遺跡). See Seyock (2003).

<sup>11</sup> Found in words such as 狗古智卑狗 \*ko-kɔ-ʔe-pie-ko, 卑奴母離 \*pie-nɔ-mə-liai, 彌馬獲支 \*mie-ma-yuak-kie.

| Characters | Transcription <sup>12</sup> | Romanization <sup>13</sup> |
|------------|-----------------------------|----------------------------|
| 卑彌呼        | *pie-mie-hɔ                 | Himiko                     |
| 卑彌弓呼       | *pie-mie-kuŋ-hɔ             | Himikoko                   |
| 卑狗         | *pie-ko                     | Hiko                       |
| 卑奴母離       | *pie-nɔ-mə-liɪ              | Hinamori                   |
| 爾支         | *ne-kie                     | Niki                       |
| 泄謨觚        | *siat-mɔ-kuɔ                | Imoko                      |
| 柄渠觚        | *piaŋ-gia-kuɔ               | Hikoko                     |
| 兒馬觚        | *zi-ma-kuɔ                  | Shimako                    |
| 多模         | *ta-mɔ                      | Tamo                       |
| 彌彌         | *mie-mie                    | Mimi                       |
| 彌彌那利       | *mie-mie-na-li              | Miminari                   |
| 伊支馬        | *ʔi-kie-ma                  | Ikima                      |
| 彌馬升        | *mie-ma-siŋ                 | Mimato                     |
| 彌馬獲支       | *mie-ma-yuak-kie            | Mimawaki                   |
| 奴佳鞮        | *nɔ-kɛ-de                   | Nakato                     |
| 狗古智卑狗      | *ko-kɔ-tʃe-pie-ko           | Kokochihiko                |

Table 1: Wa titles recorded in the *SGZ*

This already seems to indicate that the Wa people spoke a language related to Japanese. Another possible piece of evidence can be found in the following expression:

官曰彌彌、副曰彌彌那利 (*SGZ* 30)

“The official is *mimi*, the subordinate *miminari*.” (Kidder 2007:14)

It is possible that this is another example of miscommunication of Chinese scribes with the Wa people. The name for the subordinate officer could be a scribes error that transcribes the Old Japanese copula *nari* 也. The copula is a part of language so basic that it does not get borrowed, so if my assumption is correct, it would certainly connect the language of the Wa people to Old Japanese. However, this is not a verifiable hypothesis and different explanations of the title *miminari* are also possible.

Extensive research on the language data from the *GWJ* carried out by Bentley (2008b) also concludes that the Wa people were speaking Japanese. Similarly, Marc Miyake (2003) treats this language data as “Pre-Old Japanese” and hence part of the Japonic language family. With the data above and the lack of competing theories, I do believe that it is very likely that the Wa spoke a language related to Japanese.

<sup>12</sup> For brevity, tones were omitted in the LHC transcription.

<sup>13</sup> From Kidder (2007).

## 4.2. The Wa and their lands

The earliest written records that mention the Japanese islands stem from the Chinese mainland. Although the accounts are not very detailed, the prehistory of Japan can fragmentarily be traced through those ancient Chinese writings. Moreover, these written records can also be related to artifacts manufactured in China and found in Japan that contain writing.

All old Chinese sources use the term Wa 倭<sup>14</sup> to refer to Japan. It is not until the 7<sup>th</sup> century CE that the characters presently being used to refer to Japan came into use. This can be seen in an entry from the *XTS* (vol. 220), which states that “the Japanese who had studied Chinese came to dislike the name Wa and changed it to Nippon [日本]” in 670 CE (De Bary *et al.* 2001:12)<sup>15</sup>.

In this chapter I would like to give a detailed overview of relevant historical sources on the Wa people and their connections to the Korean peninsula and the Chinese mainland, moving chronologically from the oldest sources to the most recent ones (Table 2). The relevance of these historical accounts for the development of the Japanese people derives from the connection between the Wa people and their language as an early form of Japanese. Based on the information provided in the previous section, I consider the Wa people as speakers of the ancestral language to Modern Japanese.

|            | Name                   | Volume | Written by              | Period described                  |
|------------|------------------------|--------|-------------------------|-----------------------------------|
| <i>SHJ</i> | <i>Shānhǎijīng</i> 山海經 | 12     | 1 <sup>st</sup> ct. BCE | 4 <sup>th</sup> ct. BCE - 222 BCE |
| <i>LNH</i> | <i>Lùnbéng</i> 論衡      | 26, 58 | 84 CE                   | 1042-1021 BCE                     |
| <i>HNS</i> | <i>Hàn Shū</i> 漢書      | 28b    | 92 CE                   | 202 BCE-9 CE                      |
| <i>SGZ</i> | <i>Sānguó Zhì</i> 三國志  | 30     | 297 CE                  | 222-280 CE                        |
| <i>HHS</i> | <i>Hòu Hànsū</i> 後漢書   | 85     | 445 CE                  | 25-220 CE                         |
| <i>SOS</i> | <i>Sòng Shū</i> 宋書     | 95     | 487 CE                  | 420-479 CE                        |
| <i>LGS</i> | <i>Liáng Shū</i> 梁書    | 54     | 636 CE                  | 502-577 CE                        |
| <i>JNS</i> | <i>Jīn Shū</i> 晉書      |        | 649 CE                  | 265-316 CE                        |
| <i>XTS</i> | <i>Xīn Tángshū</i> 新唐書 | 220    | 1060 CE                 |                                   |

Table 2: Overview of Chinese sources

I will also try to provide further evidence that the Wa people indeed spoke an early form of Japanese during the Yayoi period when they were living on the Japanese archipelago. Unfortunately, it will not be possible to evaluate what language(s) the Jōmon people of Japan spoke

<sup>14</sup> Sometimes also transcribed as Wo. In later records also written with the character 和.

<sup>15</sup> The *SGS* (vol. 6) dates this to the twelfth month in the tenth year of King Munmu’s 文武王 reign [670] (Shultz and Kang 2012:207).

because ancient Chinese sources do not extend far enough into the past to allow for reliable connections to the Jōmon populations.

### 4.3. First mention of the Wa

Possibly the oldest source that mentions the area of the Wa people is found in the Chinese text *Classic of Mountains and Seas*<sup>16</sup> (*Shānhǎijīng* 山海經). It covers various old Chinese beliefs such as religion and mythology and also gives insights into the geography, flora and fauna of the Chinese cultural sphere. There is no exact date of when it was written, but it is usually considered to have been compiled between the 4<sup>th</sup>–1<sup>st</sup> century BCE (Strassberg 2002:xiii). This is the short section that vaguely records the location of Wa.

蓋國在鉅燕南，倭北。倭屬燕。朝鮮在列陽東，海北山南。列陽屬燕。(SHJ 12)

“Gai chiefdom is south of Great-Yan and north of Wa. Wa is subject to Yan<sup>17</sup>. Chosŏnis east of Lieh Yang<sup>18</sup> and south of the Haibei mountains. Lieh Yang is subject to Yan.”

I would like to look at the polities mentioned for an approximate dating of this entry. The Yan state fell in 222 BCE and Chosŏn became the “most powerful political authority to the east of Liaohe” in the 4<sup>th</sup> and 3<sup>rd</sup> century and was the “only power that could confront the [Yan] dynasty in those days” (Song 2004:99). Accordingly, the entry seems to refer to a time before 222 BCE and possibly after the 4<sup>th</sup> century BCE. It is not known where the Gai chiefdom 蓋國 was, but connecting it with the Kaema 蓋馬 Plateau in present-day North Korea seems to be a plausible explanation<sup>19</sup>. Accepting the location of Gai chiefdom in the area of the Kaema Plateau would mean that the location of Wa was in the central or southern part of the Korean peninsula, possibly either in an area north of the Jin state 辰國 or in the area of the Jin state. It is impossible to say whether the area of the Wa would have spread across the sea to the Japanese archipelago in the south (see chapter 5.1 for possibilities of the Japonic language family in this area).

However, given the brevity of the information contained in the *SHJ*, the entry could also be interpreted to mean that the Wa were living on the Japanese archipelago, although this interpretation is problematic, because it implies that the Chinese scribes omitted information for the southern part of the Korean peninsula for no apparent reason.

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<sup>16</sup> Also translated as *Guideways through Mountains and Seas* (Strassberg 2002)

<sup>17</sup> Ancient Chinese state during the Zhou dynasty (ca. 1046–256 BCE).

<sup>18</sup> “Lieh is also a river name.” (Cheng, Cheng and Thern 1985:200, note 35)

<sup>19</sup> “Perhaps Kai Ma [=Kaema] was part of Kai Land [=Gai].” (Cheng, Cheng and Thern 1985:199, note 32)

What is more, even the interpretation that the mention of the Wa in the *SHJ* refers to an area in the southern Korean peninsula hinges on the assumption that the Gai chiefdom was around the Kaema Plateau. Depending on where we locate the Gai chiefdom, it may also be possible that Wa refers to an area on the Chinese mainland and the term Wa does not in fact refer to inhabitants of the Japan archipelago. It is also uncertain whether the term Wa refers to the Wa people later known to be living in the Japanese archipelago.

The *SHJ* should not be considered as an accurate historical account as it contains “a wide range of beliefs held by the ancient Chinese about their world” and has been “repeatedly hand-copied, reprinted, and re-edited through the centuries into our own time” (Strassberg 2002:xiii). This historical text may not be reliable enough to make any definite statements about the early history of the Wa and it may therefore only be speculated whether this mention of the Wa is credible. In that sense, the most valuable information from the entry in the *SHJ* is that the Chinese character for “Wa” existed during the time of Chosŏn and denoted a polity recognized by the Chinese. Additional information needs to be considered to fully understand this text fragment.

Other information can be found in the *LNH*, which was published in the first century CE and includes mention of the Wa people that may be placed even further back in time. A short mention places the Wa during the time of the Zhou dynasty (ca. 1046–256 BCE), but does not provide any further details on their location:

周時天下太平，越裳獻白雉，倭人貢鬯草。(LNH 26)

“During the [Zhou] time there was universal peace. The [Yue] offered white pheasants to the court, the [Wa] odoriferous plants.” (Forke 1907:505)

It is not clear what time period exactly this entry refers to, because the Zhou period covers almost eight hundred years. A second entry from the *LNH* is more specific in regard to the timing and indicates that both entries refer to a time at the beginning of the Zhou period:

成王之時，越裳獻雉，倭人貢暢。(LNH 58)

“In the time of *Ch'êng Wang* [of Zhou, 1042–1021 BCE], the [Yue] presented a pheasant, and the [Wa] brought odoriferous plants as tribute.” (Forke 1962:208)

The entry is very similar to the one mentioned above. What is striking though, is that the Wa are mentioned alongside the Yue in both instances. If this is taken as indication that the Wa were living close to the Yue, who were living in the southeast of China, then the Wa may have also lived on the Chinese mainland during that time. However, there is no evidence to prove this theory and the accuracy of the historical sources may also be questioned. After all, it describes events that have taken place one thousand years before the book was written.

The *Book of the Later Han* (*Hòu Hànsū* 後漢書) from the 5<sup>th</sup> century CE records that the Wa people were living on the Japanese archipelago before the fall of Chosŏn. This would indicate that Wa were present on the Japanese archipelago at least from the 2<sup>nd</sup> century BCE.

倭在韓東南大海中、依山島爲居、凡百餘國。自武帝滅朝鮮、使驛通於漢者三十許國。(HHS 85)  
“The Wa live on mountainous islands in the southeast of the [Korean] Han in the middle of the ocean and comprise more than one hundred chiefdoms. Since Emperor Wu conquered Chosŏn [108 BCE], nearly thirty chiefdoms maintained contact with the Han court through envoys.”

As the entry in the *HHS* was written more than half a millennium after the fall of Old Chosŏn, its accuracy may be questioned. It may have been copied from other sources, because the entry resembles two other Chinese sources that were written before the *HHS*. The oldest of the two is the *Book of Han* (*Hàn shū* 漢書) written during the 1<sup>st</sup> century CE. It mentions that Wa comprises more than one hundred chiefdoms:

樂浪海中有倭人、分爲百餘國、以歲時來獻見云。(HNS 28b)  
“In the middle of the sea [from] Lelang are the Wa people, divided into more than one hundred chiefdoms. Tribute is offered according to the arrival of the seasons.”

While the part that connects the Wa people to the time before the fall of Chosŏn is unique to the entry of the *HHS*, the mention of the number of chiefdoms is not. It is possible that the *HHS* copied this part from the *SGZ* written in the 3<sup>rd</sup> century CE and projected the information into the 2<sup>nd</sup> century BCE.

倭人在帶方東南大海之中，依山島爲國邑。舊百餘國，漢時有朝見者，今使譯所通三十國。(SGZ 30)  
“The Wa people live on mountainous islands in the middle of the ocean southeast of Daifang. Earlier, more than one hundred chiefdoms were seen at the imperial court in Han times. Now envoys and interpreters of thirty of their chiefdoms go back and forth.” (Kidder 2007:12)

It is therefore possible that the information about the number of chiefdoms is anachronistic and based on information from the 3<sup>rd</sup> century *SGZ*. As both the *HS* and the *SGZ* were written around the time of the happenings they describe, I believe that the information contained in those two entries is more reliable. I therefore assume that that during the 1<sup>st</sup> century CE, the Wa comprised an area of about one hundred chiefdoms. During the 3<sup>rd</sup> century CE, about thirty Wa chiefdoms maintained contact with the Chinese.

Whether Wa was already used to refer to the inhabitants of Japan from the 4<sup>th</sup> or 3<sup>rd</sup> centuries BCE cannot be answered with certainty from the available sources alone. Considering other information from archaeology and genetics, I believe it is very likely that the Yayoi migration from the

Korean peninsula to the Japanese archipelago can be connected with the spread of the Japanese islands during that time.

#### 4.4. Gold seals and their inscriptions

The first direct evidence for the presence of the Wa people in the Japanese archipelago is the Gold Seal (*Kin'in* 金印) that was found in 1784 by a rice farmer at Shikanoshima Island 志賀島 in Fukuoka prefecture (Fogel 2012:351). The seal has a square base of 2,3 cm length, weighs 108,7g and is thought to have had a purple ribbon<sup>20</sup> attached to the snake-shaped handle.



Figure 5: Na Gold Seal; mirrored image of the base (Inscription: 漢委奴國王)<sup>21</sup>

It is inscribed with five characters in Chinese seal script: 漢 (Han dynasty), 委 (short form of the character Wa 倭), 奴 (*Na*) 國 ('land, country, state') 王 ('ruler, king'), meaning it was bestowed on "the sovereign [or king] of the state of Na in Wa under the [aegis of the] Han" (Fogel 2012:359)<sup>22</sup>.

The Na Gold Seal is also described in the *HHS* and can thus be dated to the year 57 CE. Through this piece of evidence, it is possible to postulate the existence of the Wa for at least the 1<sup>st</sup> century CE.

建武中元二年、倭奴國奉貢朝賀、使人自稱大夫、倭國之極南界也。光武賜以印綬。(HHS 85)

"In the 2nd year of the *jianwu zhongyuan* reign period [57 CE], the Na state of Wa sent an envoy with tribute. The envoy introduced himself as a high official. The state lies in the far south of Wa. [Emperor] Guangwu bestowed on him a seal with a tassel." (Tsunoda and Goodrich 1951:187)

It is peculiar that Na is said to be in the far south of Wa. If that was the case and *Na* is placed near present-day Fukuoka (based on where the Na Gold Seal was found and also where the directions in the *SGZ* lead to), the text should record Na as being to the north rather than to the

<sup>20</sup> See Fogel (2012:365).

<sup>21</sup> Image sources: [http://livedoor.blogimg.jp/fukuoka\\_education/imgs/a/9/a9e51f7d.jpg](http://livedoor.blogimg.jp/fukuoka_education/imgs/a/9/a9e51f7d.jpg) and [https://upload.wikimedia.org/wikipedia/commons/9/9b/King\\_of\\_Na\\_gold\\_seal\\_face.png](https://upload.wikimedia.org/wikipedia/commons/9/9b/King_of_Na_gold_seal_face.png).

<sup>22</sup> Seeley translates "Ruler of the state Nu in the land of Wa under the Han" (Seeley 1991:9).

south of the Wa chieftom. This may be explained by a simple scribe's error (the information from the *HNS* and the *SGZ* do point to Na being the northern border of Wa). However, this could also be interpreted as meaning that there were Wa chieftoms to the north of Na, meaning on the Korean peninsula or on Honshū.

The authenticity of the Gold seal and its inscription has been hotly debated by Japanese scholars and were only accepted after similar seals were found in other places. In 1956 another gold seal with a coiled snake handle was found in Shizhaishan, Yunnan Province. It was given to king Dian when he surrendered to Emperor Wu in 109 BCE (Fogel 2012:362–363; Figure 6).



Figure 6: Dian Seal; mirrored image of the base (Inscription: 漢王之印)<sup>23</sup>

Another gold seal found in a tomb in Ganquan (twenty kilometers northwest of Yangzhou) in 1981 bears a striking resemblance to the Na Gold Seal. Its base is also 2,3 cm, features a tortoise as handle and the inscription is stylistically similar. It is dated to 58 CE and was made for the ninth son of emperor Guangwu (25–57 CE), who was awarded the title “prince of Guangling” after his father's death. Fogel suggests that the Na Gold Seal and the Guangling Seal might have been manufactured in the same workshop, possibly in Luoyang (Fogel 2012:364–365; Figure 7).



Figure 7: Guangling Seal; mirrored image of the base (Inscription: 廣陵王璽)<sup>24</sup>

<sup>23</sup> Image sources: <http://img.91ddcc.com/14119905515395.jpg> and [https://upload.wikimedia.org/wikipedia/commons/8/83/King\\_of\\_Dian\\_gold\\_seal.png](https://upload.wikimedia.org/wikipedia/commons/8/83/King_of_Dian_gold_seal.png).

<sup>24</sup> Image sources: <https://p4.ssl.cdn.btime.com/t015b3ecdf680ab37aa.jpg?size=1000x667>.



#### 4.5. The Wa people and Wu Taibo

Starting from the 7<sup>th</sup> century CE, some Chinese sources record that the Wa people consider themselves to be descendants of the Chinese historical figure Taibo. The first of such mentions is a brief mention in volume 54 of the *Book of Liang* (written in the period of 626–636 CE), followed by a more substantial entry in volume 97 of the *Book of Jin* (written in the period of 626–649 CE). Except for the statement about the descent from Taibo, the wording in this entry is almost identical to that of the *SGZ* (vol. 30) which was written about four hundred years earlier. I adapted the *SGZ* translation given by Kidder (2007:14) to fit the text from the *JNS*.

男子無大小，悉黥面文身。自謂太伯之後，又言上古使詣中國，皆自稱大夫。昔夏少康之子封於會稽，繼發文身以避蛟龍之害，今倭人好沈沒取魚，亦文身以厭水禽。（*JNS* 97）

“Aristocrats and commoners all tattoo patterns on their faces and bodies. They call themselves descendants of Taibo. Furthermore, it is said, that in ancient times envoys who visited China called themselves Grand Masters. In the past, a son of the ruler Shao-kang of Xia as ruler of Kuai-ji cut his hair and decorated his body with patterns to avoid harm from dragons. Now, the Wa people, who are fond of diving to catch fish and for clams, also decorate their bodies in patterns to prevent being annoyed by water fowl.”

The information about Taibo was likely added to the stories of the Wa people in the 7<sup>th</sup> century CE and may have been unknown to the scribes in the 3<sup>rd</sup> century CE, when the *SGZ* was written down. In the next paragraphs I will give some information on Taibo to better understand the significance of this entry in the *JNS*.

According to the *SJI*, Taibo was the eldest of three sons of King Tai of Zhou. His second son was Zhongyong and the youngest was named Jili. Because Jili was the preferred heir of the king, Taibo and Zhongyong moved southeast to step aside and Jili was eventually enthroned (Nienhauser 2006:1–3). Wu Ben-li mentions that Taibo and Zhongyong moved to an area in the lower valley of the Yangtze River (present-day Ningzhen area, Jiangsu Province), the area of the indigenous “Jing Man” people (Trairong and Wu 2016:44). The Jing Man tribe were local people of the area of the lower Yangtze with customs quite unlike that of the Zhou.

These “Jing Man” natives cut their hair short and tattooed their skins. They spoke like birds singing, not a single word could be understood. Furthermore, their local customs and habits were very difficult for the Zhou people to accept. In the same river men and women had their bath naked together. It ran counter to all established customs of the House of Zhou. [...] The local natives lived by the products of the river. All of them could swim in the river and lived on catching fishes, eating raw fishes. They believed that the dragon tattooed on their skin could prevent them from any harm from fierce fish such as crocodiles. (Trairong and Wu 2016:46)

The cultures and customs of the brothers Taibo and Zhongyong were so different to that of the Jing Man that they did not know how to approach them (Trairong and Wu 2016:47). In the

*LNH*, the *Jing Man* are known as the *Wu* and Taibo is said to have gone to their area “where he collected medicinal herbs<sup>25</sup>, cut off his hair, and tattooed his body, to follow the customs of *Wu*” (Forke 1962:380)<sup>26</sup>. After Taibo fled to the *Jing Man*, he called himself Kou-Wu and was regarded as an able ruler and the *Jing Man* followed him. After Taibo died without any sons, his brother Zhongyong followed him (Nienhauser 2006:1–3). With this, Taibo was successful in establishing a state in the lands south of the Yangtze River (Trairong and Wu 2016:48).

The description of the *Jing Man* bears some striking resemblance to that of the *Wa* people in Chinese records. Both people are said to have tattooed their bodies to avoid harm from water creatures. As for the “ruler Shao-kang of Xia as ruler of Kuai-ji” mentioned in the *SGZ* and *JNS*, there are close connections to the southeast of the Chinese mainland. The Kuaiji mountains 會稽山 are in the Yuecheng District in Shaoxing in the lower Yangtze River Delta. The mythological founding of the Xia dynasty is traditionally dated to Yu the Great in the late 3<sup>rd</sup> millennium BCE (Allan 1984:242). The Tang dynasty commentator Kong Yingda 孔穎達 (574–648) also points out possible connections to the Yue people of southeast China: “[...] The Yue people’s ancestors are the progeny of his (that is, Yu’s) son by a concubine, Shaokang, who lived after the Xia (he supposedly restored the dynasty) and who was ennobled in 會稽. He referred to his state as ‘Yuyue.’ As for ‘Yu,’ this is a sound from the barbarian [Yuyue] language” (Hargett 2013:14, note 27).

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<sup>25</sup> Taibo is quoted several times as looking for medical herbs in the *LNH* (see Forke 1907: 209, 300).

<sup>26</sup> Another entry shows a contrary picture: “T’ai Po taught the Wu to wear a cap and a girdle, how would he have followed their customs, and been naked, as they were? Thus the Wu learnt propriety and righteousness, and it was T’ai Po who changed their customs” (Forke 1907:124).

## 5. Japonic spoken on the Korean peninsula

The history of the Korean peninsula is very important for analyzing the influence of Yayoi immigrants from the Korean peninsula and who those Yayoi immigrants were. If the Japonic languages are in fact related to Yayoi immigrants, we would expect to find traces of the Japonic language family on the Korean peninsula. However, it may be difficult to connect the Japonic language family with the historic inhabitants of the Korean peninsula. In fact, the Finnish linguistic Juha Janhunen assumes that there were six different language families present on the Korean peninsula during ancient times – including the Japonic language family (Janhunen 2005:76).

In this chapter I will use historical sources to give a brief overview of the Korean peninsula in ancient times. These include Chinese sources about the Korean peninsula and Korean sources like the *SGY* that was compiled in Korea and references other old Chinese sources that have since been lost, as well as the *SGS*, which offers detailed annals of the ancient kingdoms of Koguryō, Paekche and Silla. After presenting information given in the old texts, I will discuss it in regard to the Japonic language family and where it may have been spoken on the Korean peninsula. It should also be noted that there may have been more than one language spoken in a single kingdom, as well as that the language of the ruling elite may not necessarily be the same as that of the native populations.

### 5.1. Japonic toponyms on the Korean peninsula

I will now briefly consider the available textual evidence of some of the ancient languages of the Korean peninsula as well as discuss their possible relation to the Japonic language family. In recent years, a corpus of toponyms from the geographical sections of the *SGS* (volumes 35 and 37) has been discussed. These place names correspond to three provinces of the southern Koguryō territory that were conquered by Silla. The three provinces are: (1) the northwestern province of Han chou 漢州 (formerly Han shan *chün* 漢山郡 of Koguryō), (2) the central province of Shuo chou 朔州 (formerly Niu shou *chou* 牛首州, an area that corresponds with south central Koguryō, although parts of it earlier belonged to western Ye) and (3) the eastern province Ming chou 溟 (formerly 河西良~何瑟羅 \*Kasira of Koguryō, originally the territory of the Ye or Ye-Maek state) (Beckwith 2004:50)<sup>27</sup>.

Those placenames were often directly translated into the Silla language and because of that it is possible to reconstruct lexical items of its underlying language. Christopher Beckwith has

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<sup>27</sup> According to Vovin, these “Japonic-looking” placenames were mainly from the Han River basin near present-day Seoul (Vovin 2013:236); Whitman thinks that they extend “as far as modern North Hwanghae province, south of the later Koguryō capital at P’yōngyang” (Whitman 2011:154).

analyzed these lexical items and concluded that the underlying language was similar to Japonic. He postulated a macrofamily which he calls “Japanese-Koguryoic family of languages” in his 2004 book *Koguryo: The language of Japans Continental Relatives* (Beckwith 2004). He was able to record “[a]bout 130 clearly identifiable words and function morphemes from the area of the former Koguryō kingdom” from the 8<sup>th</sup> century CE in addition to fourteen lexemes from the third century CE recorded in the *HHS* (Beckwith 2004:236–237).

However, connecting these placenames with the language of the Koguryō kingdom is not the only possibility. Opponents of Beckwith’s theory claim that these toponyms may have already existed before Koguryō conquered the area and therefore this may only show a substratum language and not the native language of the Koguryō kingdom (Beckwith 2004:236).

According to Thomas Pellard, “Beckwith’s ambitious work is heavily flawed in many aspects” as Beckwith often uses problematic reconstructions and does not clearly show his methodological process that lead to those reconstructions. Thus, he concludes that “too many methodological shortcomings forbid us to accept Beckwith’s reconstructions and conclusions, although it is quite clear that some of the Koguryō place names indeed represent in all likelihood a language related to Japanese that was once spoken in the center of the Korean peninsula” (Pellard 2005:168–169).

Beckwith himself sums up some counterarguments to his theory:

Unger presents his views about this issue fairly clearly, asserting (pp. 81–82) that “the ‘Old Koguryō’ place names are actually in a language different from Koguryōan and similar to Early Old Japanese . . . [ , that] Koguryōan was just a variety of Old Korean[,] and that the place-names merely preserve the vestiges of a dying para-Japanese.” Vovin has scattered remarks on the issue throughout his book, and at the very end (p. 239) agrees with Unger that a language closely related to Japanese was spoken in the central Korean Peninsula *before* the immigration of the Puyo-Koguryo peoples, who spoke *Korean* and imposed their language on the entire peninsula. (Beckwith 2010:214, square brackets in the original)

But if the language recorded in those toponyms is not that of the Koguryō kingdom, who were the people speaking it? Juha Janhunen points out that the Korean peninsula was multiethnic and a variety of languages were spoken there: Chinese, Korean, Japonic, Mongolic, Tungusic and Amuric (Janhunen 2005:76). For the area of the Koguryō kingdom he identifies Tungusic, Mongolic and Amuric as languages that were likely spoken throughout the kingdom<sup>28</sup> (Janhunen 2005:72–74). Japonic may have also been spoken in southern Koguryō, but he maintains that “the principal territory of the toponymic corpus is located in central Korea, in an area that was only

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<sup>28</sup> Janhunen concludes his paper by saying that “the likeliest candidate for the dominant and, hence, dynastic language of Koguryō still remains Tungusic” (Janhunen 2005:84).

secondarily transferred from Paekche to Koguryŏ” (Janhunen 2005:76). The language of the toponyms may therefore be considered to have been that of the Paekche kingdom:

[...] there is evidence of ‘bilingualism’ in Paekche, suggesting that part of the Paekche population may actually have spoken contemporary form of Korean, while another part spoke the Paekche dynastic language, as used by the ruling elite of the kingdom. Most importantly, it seems possible to identify this other language with the language underlying the so-called Old Koguryŏ toponyms, recorded mainly from central Korea in the late Three Kingdoms period. It has now been unrefutably confirmed that the language of these toponyms represents a form of speech closely but collaterally related to the Japonic languages (Japanese-Ryukyu), as spoken on the Japanese Islands. (Janhunen 2005:70)

Alexander Vovin also disagrees that the language of those toponyms is the language of the Koguryŏ kingdom. He considers Japonic to represent a substratum that was present on the Korean peninsula and can be detected in the languages of Paekche and Silla, but not in Koguryŏ (Vovin 2013:222). He adds further data from the *LGS* and *SGS* (vol. 34) and concludes that the “Silla territory had originally Japonic substratum language(s) that was/were eventually assimilated by Korean” (Vovin 2013:236). With that he suggests a “gradual replacement of Japonic languages by languages closely related to Korean” from the Han River basin to the south of the Korean peninsula (Vovin 2013:236).

The data presented so far would suggest that Japonic and Koreanic were present in the south of the Korean peninsula during different time periods. Theories covered so far were considering the language of Koguryŏ to be either Japonic (Beckwith 2004), Tungusic (Janhunen 2005:84) or “some variety of Old Korean” (Vovin 2013:224). Another position is offered by Nam Pung-hyun, who analyzes the toponyms to be a Korean dialect (Early Old Korean) consisting of the languages of Koguryŏ, Paekche and Silla (Nam 2012:51).

The consequence of this ‘three-language approach’ for EOK is that the Koguryŏ toponyms of the *SGS* are to be considered Koreanic. Given the general opinion that it “has now been unrefutably confirmed that the language of these toponyms represents a form of speech closely related to the Japonic languages” (Janhunen 2005:70), the ‘three-language approach’ also implies a close connection between Japonic and Koreanic. Considering the political situation in the Korean peninsula during the period of the Three Kingdoms, it may seem unlikely that all three competing powers would have spoken the same language, especially because they were independent kingdoms over an extended period of time. It would rather be expected that the language boundaries are roughly congruent with political boundaries. To better understand this discussion, I have listed possible cognate sets from the Japonic toponyms on the Korean peninsula in Table 3.

|              |            |                |
|--------------|------------|----------------|
| <i>tɔn</i>   | ‘valley’   | OJ <i>tani</i> |
| <i>koma</i>  | ‘bear’     | OJ <i>kuma</i> |
| <i>sɔma</i>  | ‘island’   | OJ <i>sima</i> |
| <i>mura</i>  | ‘village’  | OJ <i>mura</i> |
| <i>muri</i>  | ‘mountain’ | OJ <i>mure</i> |
| <i>kučɔ</i>  | ‘mouth’    | OJ <i>kuti</i> |
| <i>mɔi</i>   | ‘water’    | OJ <i>mi</i>   |
| <i>ki</i>    | ‘castle’   | OJ <i>ki</i>   |
| <i>pataɸ</i> | ‘sea’      | OJ <i>wata</i> |
| <i>pat</i>   | ‘field’    | OJ <i>pata</i> |
| <i>kučɔ</i>  | ‘mouth’    | OJ <i>kuti</i> |
| <i>tiär</i>  | ‘temple’   | OJ <i>tera</i> |

Table 3: Selected lexical items from Koguryō toponymic data and possible cognates in Old Japanese (from Nam 2012:54)

Another problem with interpreting the toponym data is that the influx of Yayoi immigrants to the Japanese archipelago started significantly earlier than the Three Kingdoms period. The language data presented above may be over one thousand years younger than the language of the first speakers of Japanese on Kyūshū. For that reason, it may be beneficial to devote research efforts to earlier times.

## 5.2. Japonic speakers on the Korean peninsula

In this section I will consider information about the ancient kingdoms on the Korean peninsula during the Three Kingdoms period. Given that it is generally agreed that Japonic was spoken on the Korean peninsula, it should be possible to connect the language data to a group of people who were living in the area of those Japonic toponyms.

It is thought that the first immigrants that came to Japan at the beginning of the Yayoi period came from the southern tip of the Korean peninsula around the 1st century BCE (see section 3.3). It is therefore also important to try and locate the people that potentially made up the first Yayoi immigrants. Figure 8 gives an overview of the areas that will be covered in this chapter.

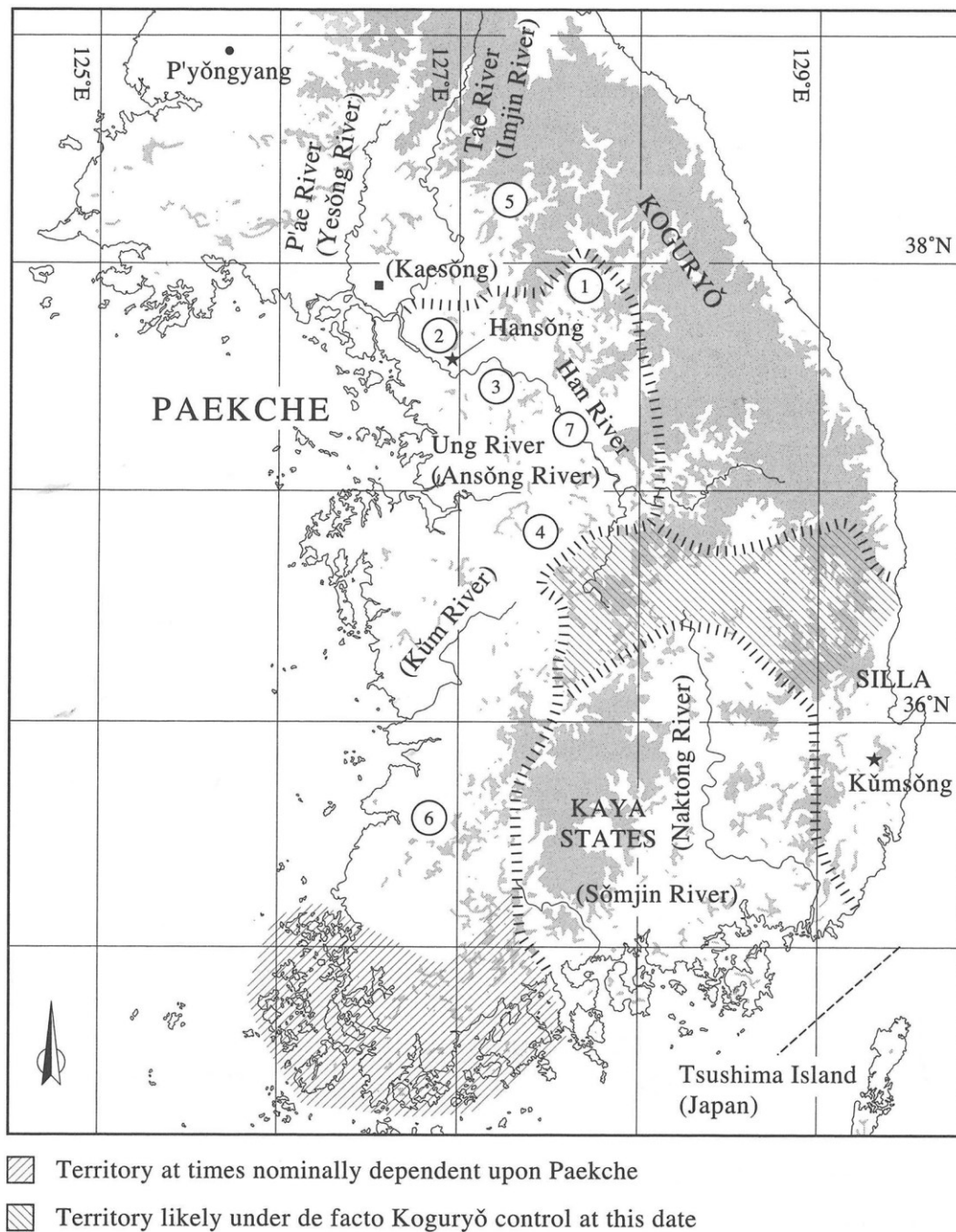


Figure 8: Korean peninsula during the Three Kingdoms Period (ca. 415 CE) (Best 2006:518)

### 5.2.1. Koguryŏ

The territory of the Koguryŏ kingdom was historically mainly confined to an area in northeastern Asia, which is clear from accounts of the *SGZ*. It also records that the Koguryŏ language is similar to that of the Puyŏ tribe, who are famous for their horses. During the 3<sup>rd</sup> century CE the Koguryŏ territory was mountainous terrain of around 2.000 square *li* and they had about 30.000 households. Legend has it that the Koguryŏ people are separate branch of the Puyŏ, whose language resembles theirs. The highest title of the royal family, the Great 大加 *ka*, is called *koch'u ka* 古雛加 (Rogers

1993:17–18). The ruling family of the Koguryŏ and Puyŏ people is related to that of Paekche (Best 2006:205), so it would also seem appropriate to consider that they were speaking a related language. This would at least be true for the ruling elite, which may not necessarily have been the same as the language of the native population. An entry in the *LGS* from the 7<sup>th</sup> century CE also suggests that the Koguryŏ people spoke a language related to that of the Paekche.

今言語服章略與高麗同, (*LGS* 54)

“[Paekche’s] current language and clothes are almost the same as those of Koguryŏ.” (translated from Natsui 2016:12)

Although the Japonic toponyms were recorded in the *SGS* as belonging to the Koguryŏ territory, it may be doubted that they also refer to the Koguryŏ language. As Nam pointed out, a Koguryŏ domination of the geographical area of those toponyms lasted less than a century (Nam 2012:51). It is also unclear whether they replaced the native population of the area or merely controlled them by military force. Therefore, I find it likely that the toponyms refer to the language of the native population that was living in this area rather than to the Koguryŏ language.

### 5.2.2. Paekche

Paekche was founded by King Onjo, the son of the Koguryŏ king (a family related to the Puyŏ) in 18 BCE (Best 2006:205, 211). This genetic relation of the ruling families implies that the Paekche kingdom likely spoke a language related to that of the Koguryŏ kingdom. However, the *SGZ* records state that initially Paekche was only one of 54 chiefdoms in the north of the Mahan confederacy. Paekche slowly gained power and eventually united the Mahan chiefdoms in the southeast of the Korean peninsula to form the Paekche kingdom. Archaeological records suggest that Paekche did not gain much control over that area until the 3<sup>rd</sup> or 4<sup>th</sup> century CE (Barnes 2001:33–34), far after its traditional founding date. Therefore, the fact that the Paekche ruling elite was related to the Koguryŏ people does not necessarily entail that the native Mahan population that was later conquered by the Paekche changed their language in the process. In the following paragraphs, I will briefly discuss the Paekche language, followed by the Mahan language.



There are also Paekche words recorded in old materials that have led to speculation about the Paekche language and its affiliation with several language families. Roy Andrew Miller analyzed some Paekche language<sup>29</sup> data recorded in old Japanese sources and concluded that the Paekche language was part of the Altaic language family by listing etymologies connecting them with several languages of that group such as Tungusic and Turkic (Miller 1979:68).

Likewise, John Bentley also looked at information of the Paekche language from Old Japanese sources and found it plausible that Paekche and the Silla language were closely related. He also relates his findings to Proto-Korean (Bentley 2000:439–440).

A different view is given by Juha Janhunen, who considers the possibility of two languages being present in Paekche, where “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.” He relates the Paekche dynastic language to the Japonic language family (Janhunen 2005:70).

This view is also supported by an entry from the *SGZ*, which suggests that there may have been a division in the territory of the Paekche kingdom with differences between the northern and southern parts.

其北方近郡諸國差曉禮俗，其遠處直如囚徒奴婢相聚。(SGZ 30)

“The people of their northern communes that are close to our commandery have a fragmentary awareness of our rites and customs, but those located further away are just like aggregations of prisoners or slaves.” (Rogers 1993:22)

The northern communes refer to the area that was first conquered by the Paekche clan, while the south was inhabited by the native Mahan population until a later date. It is therefore possible that the people of the northern parts were similar to the Paekche, while the south refers to the Mahan people and their language. The southern tip of the Korean peninsula is also where the first Yayoi immigrants that came to Japan are expected to have lived. This makes the (southern) Mahan people a potential candidate for speakers of Japonic. Unfortunately, historical records do not contain information on whether they were already present in the area when the Yayoi period started.

The only information that could help date the existence of Mahan is an entry in the *HHS*, which states that King Jun of Chosŏn, who fled after being defeated by Wiman, founded the Mahan polity in 195 BCE. However, another entry suggests that the native Mahan population was already present before that date: “[Jun] attacked Mahan and defeated it, then set himself up as

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<sup>29</sup> Which he considers as part of the Old Korean languages, along with Old Koguryŏ and Old Silla (Miller 1979:3).

the King of Han. [His] line was later [...] cut off, but the Mahan people again set themselves up as the kings of Chin [in southeastern Korean]” (Byington 2009:151).

Bruno Lewin states that even though the language of the Paekche ruling elite was related to Puyŏ speakers, the native Mahan population of the area spoke a different language (Lewin 1980:171). He bases his assumption on information from the *Zhōu Shū* 周書:

王姓夫餘氏，號於羅瑕，民呼爲鞬吉支，夏言竝王也。(ZHS 49)

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

Lewin points out that Paekche rulers who came to Japan during the 7<sup>th</sup> century CE were awarded the title of *kudara no konikishi* in the Kabane system. He connects the title *konikishi* with the Han-Paekche title \*kenkilci 鞬吉支 recorded in the *ZHS* (Lewin 1980:174–175) and considers this title to be of Korean origin (Lewin 1980:181).

Principally, the Paekche and Mahan territory would geographically fit the area where the Japonic language may have been spoken. Unfortunately, there is not enough data on both languages to make any viable assertions that connect the Japonic language family to these kingdoms. Additionally, research is complicated by a considerable chronological gap between the historical information on the Mahan and Paekche languages and the supposed start of migration of the Japonic language to Kyūshū.

### 5.2.3. Kaya

As the area on the Korean peninsula closest to the Japanese archipelago, Kaya 伽倻 may provide some important insights into the relations the Wa people had with the Korean kingdoms. Based on historical records, the Kaya kingdom is thought to be the successor of the Pyŏnhan confederacy. There is no information on the language of the Pyŏnhan people, but the *SGZ* implies a close cultural connection with the Wa people: “The men and women, being close to the Wa, also tattoo their bodies” (Rogers 1993:23). This could mean that the Kaya and Wa people spoke a related language. I will now provide some information about the Kaya people to try and ascertain how similar they were to the Wa people.

Contact between Kaya and Wa across the sea was very likely, as ships frequented the waters for trading. The Kaya area is the last stop the Chinese ships made before crossing the ocean to Kyūshū (Kidder 2007:12). It does appear that Chinese ships frequently came to the southern Korean peninsula from Lelang and traded with the people there. This is evident from Chinese artefacts found in the area, such as Chinese-style mirrors, coins, bronze belt hooks, bronze horse

bells, glass beads and lacquer cosmetic cases (Kim 2005:174). Additionally, Chinese records mention that marine trade routes existed between the northwestern Korean peninsula along its western and southern coasts (Kim 2005:176–177).

The culture of the Kaya area was characterized by brown and black undecorated pottery since the 3<sup>rd</sup> century BCE (Kim 2005:175). It emerged from the agrarian culture in the southern Korean peninsula and metal culture from the northwest in the Kimhae and Chongwon areas from where it spread to the coastal areas of Kyōngnam and the Nakdong River region. Kim Taesik states that “because of the cultural gap that existed between the original inhabitants of the coastal areas of Kyōngnam and the Nakdong River region area and those who migrated to the area later on, this process of cultural integration, and the subsequent societal changes which occurred as a result of the creation of this new culture, must have taken at least 200 years to complete” (Kim 2005:176). He thinks that Kaya culture began in the Kimhae and Ch’angwŏn areas of Kyōngnam in the 1<sup>st</sup> century BCE, while the Kaya statelet was established in the 2<sup>nd</sup> century CE and gained power towards the end of the 3<sup>rd</sup> century (Kim 2005:188–189). The strategic location on the way between Lelang and the Japanese islands on the one hand and large-scale iron production have led to Kaya’s rise in power in the lower reaches of the Nakdong River area (Kim 2005:178).

Similarities between the Kaya and Wa people may indicate that the Wa people came from the area of Kaya during the Yayoi period. However, according to Taesik Kim, the opposite seems true:

A look at Yayoi pottery and its imitations from the 2<sup>nd</sup> century B.C. to 1<sup>st</sup> century A.D. which were excavated in the Kimhae area reveals that some Yayoi people who originated from the Kyushu area either migrated to or visited the Kimhae area, and that their traditions were preserved locally by their descendants. (Kim 2005:195)

He speculates that around the 2<sup>nd</sup> century CE, Kaya may have imported Wa people as slaves for the labor required for iron production and agriculture (Kim 2005:195). Future research may be able to elaborate on the similarities between the Pyōnhan/Kaya and the Wa people and provide insight into the languages spoken in the Kaya polity.

#### **5.2.4. Silla**

The language of the Silla kingdom is widely believed to be ancestral to Korean, since Silla unified the Three Kingdoms of Korea in the 660s CE and can thus be considered to be the oldest known form of Koreanic. This makes research on the language of the Silla kingdom very important for understanding early contact of Japonic and Koreanic and can contribute to determining whether Japonic and Koreanic are related or not.

The Silla kingdom emerged as one of the Chinhan chiefdoms during the earlier Samhan period and eventually unified all chiefdoms. Therefore, the Silla language might have been related to that of Chinhan. The *SGZ* states that the language of the Chinhan was different from that of the Mahan and likely came from the area of the Shandong peninsula. The Chinhan people are said to have fled from the Qin 秦 to avoid harsh service and came to the Han state where they settled in the eastern part of the Mahan territory. Furthermore, they resemble the people of Qin and their terminology is that of Yan 燕 and Qi 齊 (Rogers 1993:22–23).

Chinese sources from the Three Kingdoms period contain a short description of the relationship of the Silla and Paekche languages in the 6<sup>th</sup> century CE. It is recorded that Silla did not have writing and had to go through Paekche in order to contact the Liang court. From this entry it is unclear though, whether the language of Silla was in fact different from that of Paekche or not and both interpretations are possible:

其拜及行與高驪相類。無文字，刻木爲信。語言待百濟而後通焉。(LGS 54)

“[Paekche’s] customs are similar to that of Koguryō. (In Silla) there are no characters. They communicated by carving markings on wood as a sign of good faith. Their language<sup>30</sup> is translated by and transmitted through Paekche [to the Liang court].” (Kim 2014:203)<sup>31</sup>

Kim Chang-Seok interprets this to mean that “Silla was unaware of Chinese characters around 521 CE and used a piece of wood on which signs were inscribed as a kind of token of trust. Thus, the people of Silla used a piece of wood to deliver information even before they knew Chinese characters” (Kim 2014:203). He also raises the following possibility:

At the time, Silla envoys visited the Liang dynasty of China along with Paekche envoys. The Silla envoys could only communicate with Liang through the Paekche envoys. Under such circumstances, there is a possibility that Paekche purposefully misrepresented the culture of Silla to Liang. (Kim 2014:203)

In order to understand this entry from the *LGS*, I would like to briefly discuss the introduction of Chinese characters into the Korean peninsula. While Chinese writing was present in the Korean peninsula from the 2<sup>nd</sup> century BCE, the practice of reading the Chinese characters with Korean pronunciations probably dates to 372 CE, when Koguryō started teaching Chinese classics in a national academy. Possibly the first case of Chinese characters in Silla was on a Silla Monument in Chungsōng-ri in P’ohang before 501 CE (Kim 2014:203). Other sources are short inscriptions found in 536 CE in Yōngch’ōn (Lee 2003:91–92) and a monument erected by King Chinghūng

<sup>30</sup> This could also refer to their written language.

<sup>31</sup> The first and last sentence of this translation were added by me.

at Mount Pukhan in 555 CE. In 545 CE, Kōch'ilpu 居柒夫 compiled a national history of Silla (Lee 2003:87–88).

The carving markings mentioned above in the *LGS* entry are known as *Mokkan* (or *Mokgan*) 木簡 in Korean. By 2011, around 700 pieces of those wooden tablets (also translated as wooden slips) were found in 27 sites mainly in areas of Lelang, Silla and Paekche (Kim 2014:199), with the majority of the wooden tablets found in the former capitals of Silla and Paekche. Almost three quarters of the wooden tablets contain text on them and date from the mid-6<sup>th</sup> century to the 9<sup>th</sup> century CE (Lee 2013:130). This suggests that Chinese characters were used in Silla about the time the *LGS* was written.

Lee SeungJae notes that “Silla seems to have lagged behind in the development of literacy and sophisticated writing practices by approximately 150 years” (Lee 2014:177). He related the change from using *on-gana* writing to using *kun-gana* writing in Japan to a “shift from following the notational conventions of Baekje to following those of Silla” (Lee 2014:151).

The recent excavations of wooden tablets in the Korean peninsula may allow researchers in the future to analyze the languages of Silla and Paekche in greater detail. Extensive research on these writings could uncover the languages underlying the inscriptions on those wooden tablets and show whether the languages of Silla and Paekche belong to the same language family or are completely different languages.

### 5.3. Conclusion

In regard to the relationship between the Koreanic and Japonic languages families, one important question to answer is the following: Is Japonic and Koreanic genetically related and therefore to be put in the same language family or were both language families present on the Korean peninsula and similarities between them are due to contact and borrowing?

As I have shown earlier, old sources state the Chinhan and Mahan spoke different languages. Equating Chinhan with the language of Silla and therefore the Koreanic language family seems plausible from historical sources. What needs to be answered is whether the language of the Paekche kingdom belonged to the same language family as the Mahan language, or if the Mahan language was distinct and the Paekche language, which was potentially part of the Koreanic language family.

It remains to be seen if researchers can agree on an interpretation of those toponyms and its relevance for the origins of Japanese. Given the problems that still exist, it seems this can only be achieved to a satisfactory degree if one fully comprehends the prehistory of the Korean peninsula and its inhabitants. The first step would be to relate language families to the ancient kingdoms of the Korean peninsula with a great degree of confidence.

## 6. Geography and archaeology

The original Yayoi immigrants from the Korean peninsula settled the northern parts of Kyūshū from where Yayoi culture eventually spread to the south and east (Hudson 1999:103). In this chapter I would like to examine the geography of Japan in the years before prior to the first Japanese writings. This can help to better understand the emergence of the Wa state and thus the prehistoric developments of the Japanese language. The 3<sup>rd</sup> century CE Chinese classic *History of the Three Kingdoms* (*Sānguó Zhì* 三國志) provides a good starting point for the political situation at the end of the Yayoi period.

It states that the 2<sup>nd</sup> century was characterized by fighting among the individual Wa chiefdoms. Through the various accounts offered it is possible to roughly date the end of the conflict:

住七八十年、倭國亂、相攻伐歷年、乃共立一女子爲王、名曰卑彌呼 (SGZ 30)

“Seventy or eighty years ago, year after year in the Wa polity there was chaos as they fought each other.

Then they made a female the ruler, named Himiko.” (Kidder 2007:16)

A consequence of the skirmishes among the Wa chiefdoms was that only thirty chiefdoms of formerly more than one hundred kept contact with the Chinese court. This also shows a change in political organization as a result of this fighting period.

The *Book of Liang* (*Liáng Shū* 梁書) places the most severe warfare between 178–184 CE. This suggests that there was power struggle among the chiefdoms until around 184 CE. After some years without a ruler, Queen Himiko was enthroned and peace was established. She reigned until her death around the year 247 CE and was followed by a female relative. Soon after, keyhole-shaped tumuli started appearing and the Kofun period began.

### 6.1. The political center in the Late Yayoi Period

The common reading of the capital chiefdom of Himiko as Yamatai is based on the assumption that the transcription 邪馬壹國 in the *SGZ* is an error and the correct spelling should be 邪馬臺國 found later in the *HHS*. However, in the *SGZ*, the character *ichi* 壹 is used 86 times and *tai* 臺 56 times and both characters are never used incorrectly (Fan Yeh, cited in Kidder 2007:234). The original reading of the capital’s name would therefore most likely have been *Yamaichi* during the reign of the queen.<sup>32</sup>

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<sup>32</sup> Modern Japanese texts often use the spelling 邪馬壹国, which has first been put forward by Furuta Takehiko in 1969 (see Nogami 2012:219).

In the 5<sup>th</sup> century the name of the capital was changed to the spelling 邪馬臺國. According to Seyock, a footnote in the *HHS* shows that the pronunciation of the name of the capital was adapted (Seyock 2004:141):

其大倭王居邪馬臺國。【案：今名邪摩堆、音之訛也。】(*HHS* 85)

“That ruler of Great-Wa lives in Yamadai<sup>33</sup> chiefdom. (Note: The name is now Yamatai, this pronunciation is erroneous.)”

After Queen Himiko died around 247 CE, contact between the Wa and the Chinese mainland almost ceased. Except for a visit to the Western Jin court in 306 CE, there was no more contact until 413 CE. With this visit to the Eastern Jin court (265–316) in 413, “a new age of frequent diplomatic contacts with China began” (Wang 2005:221–222).

I believe that the political center of the Wa state moved from Yamaichi in Kyūshū during the Yayoi period to the Yamato area in the Kofun period and was now called Yamatai. When Chinese scribes re-established contact with the Wa in the 5<sup>th</sup> century, they were not aware that the capital had been moved but knew the spelling 邪馬壹 from the *SGZ*. As this did not accord with the current name of the capital, they assumed a spelling mistake in the earlier records and changed it to a similar looking character that resembled the new pronunciation. For clarification, they added an annotation to the text in the *HHS* that the pronunciation had changed.

The debate of the political center during the end of the Yayoi period has been discussed heavily among researchers since the Nara period and many placed it in Yamato in the Kinai area<sup>34</sup>. Unfortunately, a detailed analysis of this is outside the scope of this study. Therefore, I will confine myself to only point out one salient fact that makes a location in the Kinai area very unlikely:

女王國東渡海千餘里、復有國、皆倭種 (*SGZ* 30)

“Across the ocean more than one thousand *li* east of the queen’s domain are more chiefdoms, all like the Wa.” (Kidder 2007:16)

This sentence can only be explained if Yamaichi is placed in Kyūshū, as there are other Wa chiefdoms *across the ocean* on Honshū and Shikoku. Presumably, the chiefdoms of Kyūshū number around thirty, while all the Wa chiefdoms, including those of Honshū and Shikoku, number more than one hundred. In contrast to this, to the east of Kinai in Honshū is the Pacific Ocean and no lands inhabited by Wa people. The island of Hokkaidō can also be excluded, because it is

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<sup>33</sup> Based on LHC \**də* and MC \**dái*. In Japan it is usually transliterated as Yamatai based on the Japanese readings of the characters.

<sup>34</sup> See Young (1958) for a comprehensive discussion of the discourse from 720–1945.



neither to the east of Honshū, nor are there any known Wa settlements on it. I will thus assume that Yamaichi was in Kyūshū in the following sections.

## 6.2. Eastward move of the capital

The *New Book of Tang* (11<sup>th</sup> century CE) contains information of a change of the Wa capital from Kyūshū to the Kinai region. It is stated that before Jinmu Tennō there were thirty-two generations of rulers in Kyūshū, after which the location of the capital was moved to Yamato.

自言初主號天御中主，至彥瀲，凡三十二世，皆以「尊」爲號，居築紫城。彥瀲子神武立，更以「天皇」爲號，徙治大和州。(XTS 220)

“The Japanese say that from their first ruler, known as Ame-no-minaka-nushi, to Hikonagi, there were altogether thirty-two generations of rulers, all bearing the title of *mikoto* and residing in the palace of Tsukushi. Upon the enthronement of Jinmu, son of Hikonagi, the title was changed to *tennō* and the palace was moved to the province of Yamato [...]” (De Bary *et al.* 2001:12)

This entry indicates that the Chinese scribes were familiar with the early Japanese writings as is shown by the forms and the titles that were being used. However, Japanese sources do not mention anything about the generations of rulers in Tsukushi, which raises the question of where this information came from.

One possible explanation is that it may refer to the several deities mentioned in the *Kojiki*. I find this unlikely, because the *XTS* specifically mentions that they were residing in the palace of Tsukushi. Additionally, there are much less than thirty-two generations of deities mentioned in the *Kojiki*.

This source is difficult to verify and thus seems unreliable. I would still like to briefly describe the implications it could have should future research prove successful in validating its contents. This entry would connect the legendary emperor and founder of the Yamato people to Tsukushi, which was around Fukuoka prefecture in northern Kyūshū (Philippi 1969:618). It also indicates a rough time depth to this Kyūshū centered people. Considering these 32 generations in Kyūshū and assuming an average generation length of 20–30 years, the ancestral generations in northern Kyūshū can be estimated to have lived there for about 640–960 years before the capital moved to Yamato. It is possible that one of these ruling generations is represented by the Na King inscribed in the Na Gold Seal that was found in the Fukuoka area and has been dated to 57 CE. Placing the palace of Tsukushi mentioned in the *New Book of Tang* in the Na 奴 area referred to in the Na Gold Seal seems plausible, considering that it states “Japan in former times was called Wa-nu. (日本，古倭奴也)” (De Bary *et al.* 2001:12; XTS 220).

Lexical evidence from the *SGZ* supports the assumption that the Japanese language was already spoken by the Yayoi people of northern Kyūshū (see 4.1). These people are known to have practiced wet-rice agriculture and came from the Korean peninsula. In the next sections I will illuminate some possibilities for the origin of those early Yayoi immigrants. Thereby it is important to align archaeological findings with language families and trace their trajectories back in time.

### 6.3. Farming/language dispersal hypothesis

The ‘farming/language dispersal hypothesis’ (Bellwood and Renfrew 2002, Bellwood 2005) is an important concept that sheds light on the historical affiliations of a language family with its geographical expansion over time. Archaeobotanical evidence can explain where the cultivation of certain crops began, how its domestication progressed and how the agricultural subsistence system led to its carrier’s expansion. This can be achieved by connecting the vocabulary of proto-languages related to farming and the archaeology of these early farming technologies and thus ties a language family to a geographical area during a certain period of time (Stevens and Fuller 2017:175).

This hypothesis is based on the assumption that better farming technologies will facilitate population growth and subsequently lead to greater population densities. This in turn leads to the expansion of early farming societies, settling new lands and spreading their agriculture and languages in doing so (Stevens and Fuller 2017:154). This is not to say that all language families spread through the development of agriculture. There are also examples of languages originating amongst hunter-gatherer societies (for example Uralic, Eskimo-Aleut, Athabaskan and Algonquian in Canada) as well as agriculturalist language families (for example Egyptian, Sumerian, Mixe-Zoque and the Caucasian language families) that did not spread (Bellwood 2005:19).

Peter Bellwood emphasizes the importance of reconciling evidence from linguistic research and archeological excavations:

If we are to explain the genesis of language families coherently, we must offer reconstructions which tie language spreads to language speakers, and language speakers to archaeological horizons. I see no benefit in simply proposing scenarios for language family origins and dispersal histories *in vacuo*, with no reference to an explanatory background cultural context. (Bellwood 2005:19)

In the following sections I will consider the bioarchaeology of Japan and the Japanese vocabulary related to the early agriculture in Japan. I will then discuss various ideas that have been put forward about the origin of the Japanese people in relation with their subsistence system. This will show

the problems that still remain in tracing the Japanese people through history and outline some possible approaches for future research.

#### 6.4. Introduction of wet-rice agriculture to Japan

The earliest archaeological finds of rice in the Japanese archipelago are thought to be dry-field rice and did not have any significant sociocultural impact on the Jōmon populations. It was not until the introduction of irrigation technology from the Korean peninsula at the start of the Yayoi period that profound changes in lifestyle set in (Nasu and Momohara 2016:505; Takamiya 2001:209).

The transition between the Jōmon and Yayoi periods used to be dated to about 400–300 BCE and connected to the arrival of wet-rice agriculture in the Japanese archipelago (Hudson 1999:103). In order to distinguish the Yayoi from the Jōmon period, the existence of paddy fields and wet-rice agriculture is one of the best indicators for determining the start of the Yayoi period.

The dating of the introduction of rice cultivation has been challenged in 2003, when AMS <sup>14</sup>C dating was used to analyze charred remains that were stuck to pottery samples. The results meant that the beginning of the Yayoi period was dated back to a time about 500 years earlier than previously thought (Shōda 2007:1). Excavations at the Itazuke site (Fukuoka City) have revealed paddy fields, irrigation channels, water reservation ponds and carbonized rice, which suggests that rice cultivation was already present in northern Kyūshū around 935–915 BCE (Rhee *et al.* 2007:415–416; Takahashi 2009:71). Moreover, Barnes states that pre-existing contact between northern Kyūshū and southern Korea facilitated technological transfer and is thought to have occurred between 800 and 600 BCE (Barnes 2015:271).

For the introduction of wet-rice agriculture into Japan there are usually three main theories that are considered among researchers: (1) Northern, (2) Chanjian (central coastal China) and (3) Southern routes<sup>35</sup>. In addition to that, Satō Yōichirō suggests a ‘south-north dual origin hypothesis’ (南北二元説): First upland rice came from the south and subsequently paddy field rice cultivation came from China via the Korean peninsula (Satō 1992:732).

A southern origin of the Japanese rice is advocated by Yasuda Yoshinori, who places the origin of the Japanese rice around the lower reaches of the Yangtze River in southeastern China (Yasuda 2009:58). This can also be seen in the maps in Figure 9. The main difficulty is to locate the route the rice took until it was finally planted on Japanese soil.

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<sup>35</sup> I used the naming scheme from Takamiya (2001:210).

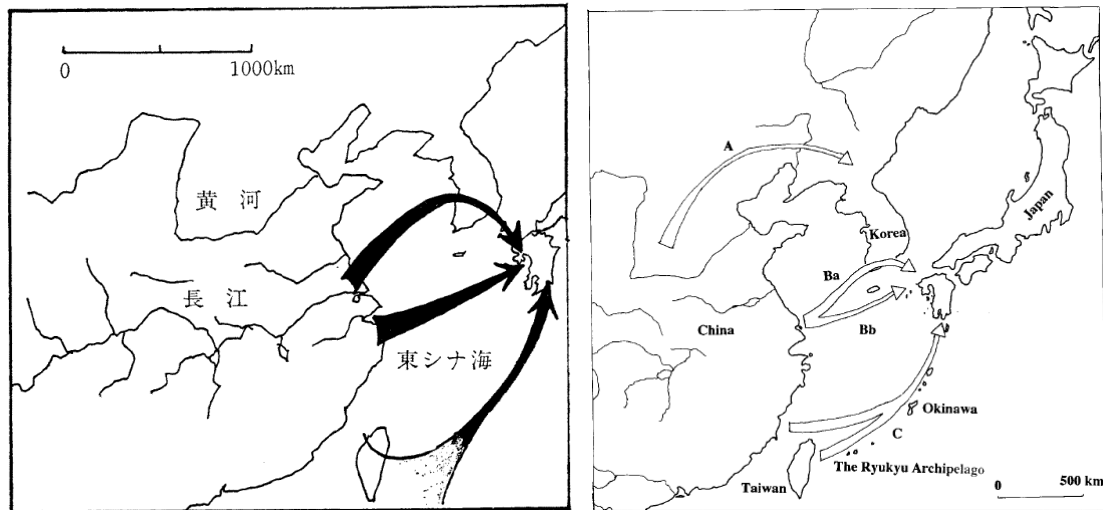


Figure 9: Theories about the introduction route of rice (from Satō 1992:732 (left) and Takamiya 2001:210 (right))

Takamiya Hiroto thinks a southern route of the rice in Japan is unlikely “since no archaeological data indicate that the late Middle to Late Jomon culture elements have any link to the south” (Takamiya 2001:222). This leaves the northern routes labeled A and B in Figure 9. I will provide additional information in section 6.6 and 6.7.

Other view are shared by Shitara Hiromi, who argues that Yayoi culture was a complex of multiple farming cultures, which were gradually formed as a result of acceptance of various agri-cultural forms that developed in various areas based on its environment (Shitara 2014:465). A temporal framework is given by Fujio Shin’ichirō. He believes that rice cultivation during the Yayoi period started in the 10<sup>th</sup> century BCE in the coastal regions of the Genkai Sea 玄界灘<sup>36</sup>. At the end of the 8<sup>th</sup> century BCE it reached the areas around Chikugo 筑後 (northern coast or the Ariake Sea 有明海) and left the island of Kyūshū in the 7<sup>th</sup> century BCE and reached the Seto Inland Sea 瀬戸内海, as well as to the Tottori and Kōchi plains. After this it quickly spread westward to the Kansai area (Fujio 2014:140).

Connecting the spread of rice to the Japonic language, John Whitman argues that this immigration movement coincides with the arrival of the Japonic language family in the Japanese archipelago, which came with the Yayoi settlers at around 950 BCE, reaching the inland sea at around 600 BCE. He states that the introduction of the Koreanic language family and the resulting disappearance of the Japonic languages from the Korean peninsula was around 300 BCE (Whitman 2011:149). Miyamoto Kazuo also advocates the demic diffusion theory that postulates four stages

<sup>36</sup> The coast of Kyūshū facing the Korean peninsula.

for the development of agriculture in Northeast Asia: (1) spread of millet agriculture to the Korean peninsula (ca. 3.300 BCE); (2) spread of wet-rice agriculture from the Shandong peninsula to the Liaodong peninsula (ca. 2.400 BCE); (3) spread of polished stone tool agriculture (ca. 1.500 BCE); and (4) spread of irrigated agriculture from the southern Korean peninsula to northern Kyūshū (ca. 8<sup>th</sup> century BCE) (Miyamoto 2016:53–56). Based on the Japonic toponyms in Korea (see section 5.1) and the spread of wet-rice agriculture, both Whitman and Miyamoto connect the presence of Japonic on the Korean peninsula with the Mumun culture, which arrived there around 1.500 BCE (Whitman 2011:157, Miyamoto 2016:70–72).

## 6.5. Japanese rice vocabulary

Considering that rice came to Japan from the coastal areas of southeastern China, the vocabulary for terms related to rice agriculture used in Japanese should also reflect this general area. Martine Robbeets states that Japanese terms related to cultivation and weaving can be connected to Proto-Transeurasian (macro-Altaic). Coastal subsistence terms are shared between Japanese and Korean and terms for rice seem to derive from Austronesian (Robbeets 2017:222). Vovin, on the other hand, connects rice-related vocabulary to Austroasiatic but bases his assumptions only on three “tentative Austroasiatic etymologies” (Vovin 1998:375).

This view is challenged by Sakiyama Osamu, who analyzed rice-related terms in Japanese and concluded that they can be connected to the Austronesian language family that originated in Taiwan (Sakiyama 2012:390). Through his research, he was able to list a total of ten rice-related terms that have Austronesian cognates (Table 4).

| Japanese                                  | Austronesian                   |
|-------------------------------------------|--------------------------------|
| <i>hie</i> 稗 ‘barnyard millet’            | bəRas (PWMP)                   |
| <i>ine</i> 稲 ‘rice plant’                 | *inay (Philippine)             |
| <i>hatake</i> 畠 ‘field (for cultivation)’ | *pa(n)daŋ (PWMP) <sup>37</sup> |
| <i>wase</i> 早稲 ‘early ripening rice’      | *pajay/*pajəy (PAN)            |
| <i>yone</i> 米 ‘husked grains of rice’     | *qənaŋ (PWMP)                  |
| <i>sawa</i> 澤 ‘swamp’                     | *sabaq (PMP)                   |
| <i>kome</i> 米 ‘husked grains of rice’     | *Səmay (PAN)                   |
| <i>suwe &gt; ue</i> 植え ‘(rice) plant’     | *suwan (PMP)                   |
| <i>uru</i> 粳 ‘nonglutinous grain’         | *wuru (Taiwanese)              |
| <i>awa</i> 粟 ‘foxtail millet’             | *zawa (PWMP)                   |

Table 4: Japanese-Austronesian cognate sets of rice-related words (Sakiyama 2012:379–383)

<sup>37</sup> Robbeets (2017:230–231) provides a Proto-Transeurasian etymology for *hatake*.

According to Whitman, Proto-Koreanic and Proto-Japonic do not share any vocabulary related to wet rice cultivation (Whitman 2011). The lack of shared vocabulary with Proto-Japonic was extended by Robbeets to include the Altaic language family. She further assumes that Japanese vocabulary for wet rice cultivation can be explained by loans from Proto-Austronesian (Robbeets 2017). This view also entails that if Proto-Koreanic and Proto-Japonic were related, they likely split before Proto-Japonic attained vocabulary for wet rice agriculture (Whitman and Hudson 2017:149).

## **6.6. The route of the Austronesian elements of the Japanese language**

I have outlined possible connections between the Japanese wet rice agriculture and etymological evidence that ties Japanese rice-related vocabulary to the Austronesian language family. If one wants to credibly explain a connection between the Austronesian rice farmers and the Japanese Yayoi population, it should be explained how such a connection could have come about. For that I will consider data from archaeological research that deals with Austronesian elements on the Japanese islands.

Research generally agrees that the homeland of the Austronesian language family is the island of Taiwan, from where it spread southward into the Philippines until eventually settling across the Pacific and Indian Ocean (Kikusawa 2015:660). Tanudirjo assumes that the Austronesian language emerged on Taiwan after it was settled in 4.000 BCE by agriculturalist immigrants from southern China, possibly from the areas of Fujian or Guangdong (Tanudirjo 2014:511). Blust on the other hand suggests that the Austronesian languages came to Taiwan from southern China and dates this immigration around the period of 3.500 to 4.000 BCE (Blust 2013:749).

Genetic data on the ancient populations of Taiwan suggests that based on their paternal lineages, Taiwanese aborigines “likely derived from the Daic populations” (Li *et al.* 2008:2). Before the Austronesians moved to Taiwan though, they were likely living on the mainland. In this context, Bellwood speaks of “Pre-Austronesian forebears in southeastern coastal China” (Bellwood 2005:24–25).

The Austronesian language family spread from the island of Taiwan across the Pacific and Indian Oceans to Madagascar (Malagasy) in the west, Easter Island (Rapanui) in the east, New Zealand (Māori) in the south and Hawaii in the north (see Figure 10). The expansion across such a vast area was achieved mainly through highly developed sea faring technology during prehistoric times (Kikusawa 2015:657–660), with estimates for the start of the Austronesian expansion ranging around 2.500, 2.300 and 2.200 BCE (Hudson 2012:260).

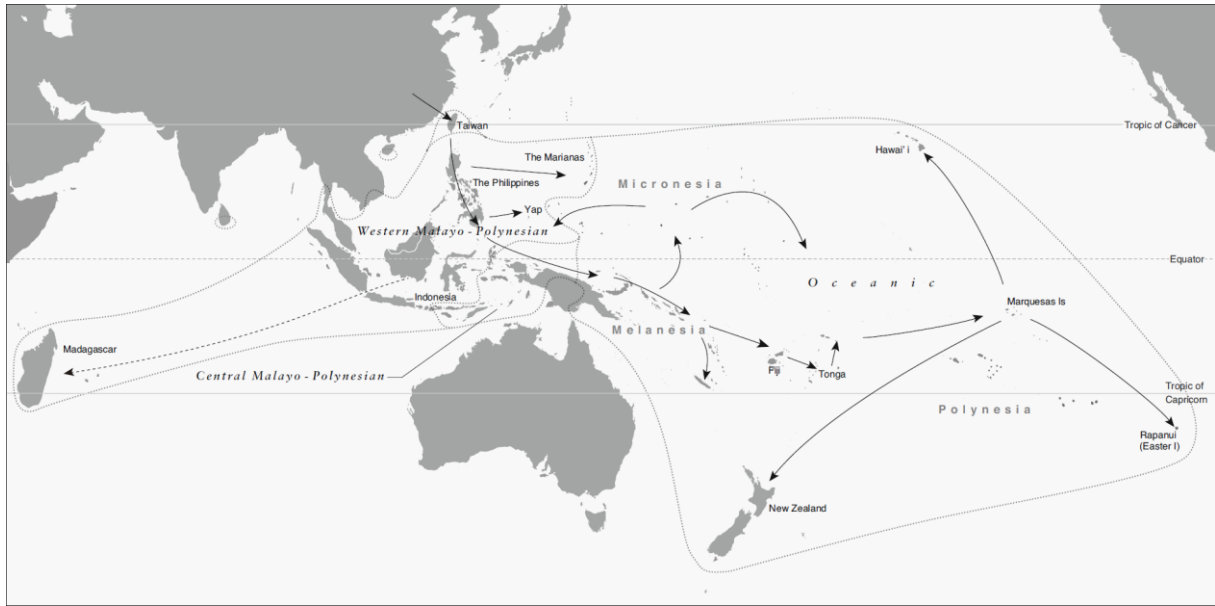


Figure 10: Geographic expansion of the Austronesian language family (from Kikusawa 2015:658)

The distance between the island of Taiwan and the southern Ryūkyū islands of Japan is only 250 km (Summerhayes and Anderson 2009:77–78), which makes them a likely candidate for a pre-historic Austronesian settlement. One could also hypothesize that the northward Kuroshio Current could have helped this colonizing process (see Figure 11). However, as Adrian Horridge points out, sailing out to sea was only possible when the seafarers could be certain that the wind would blow them back close to their home. “Sensible seamen approach land upwind and lay-off until they find a calm landing” to ensure that “their boats would naturally take them on the least foolhardy explorations with expectation of safe return” (Horridge 2006:157–158). If this principle is applied to ocean currents, following the Kuroshio Current may not have been an option for prehistoric seafaring people.

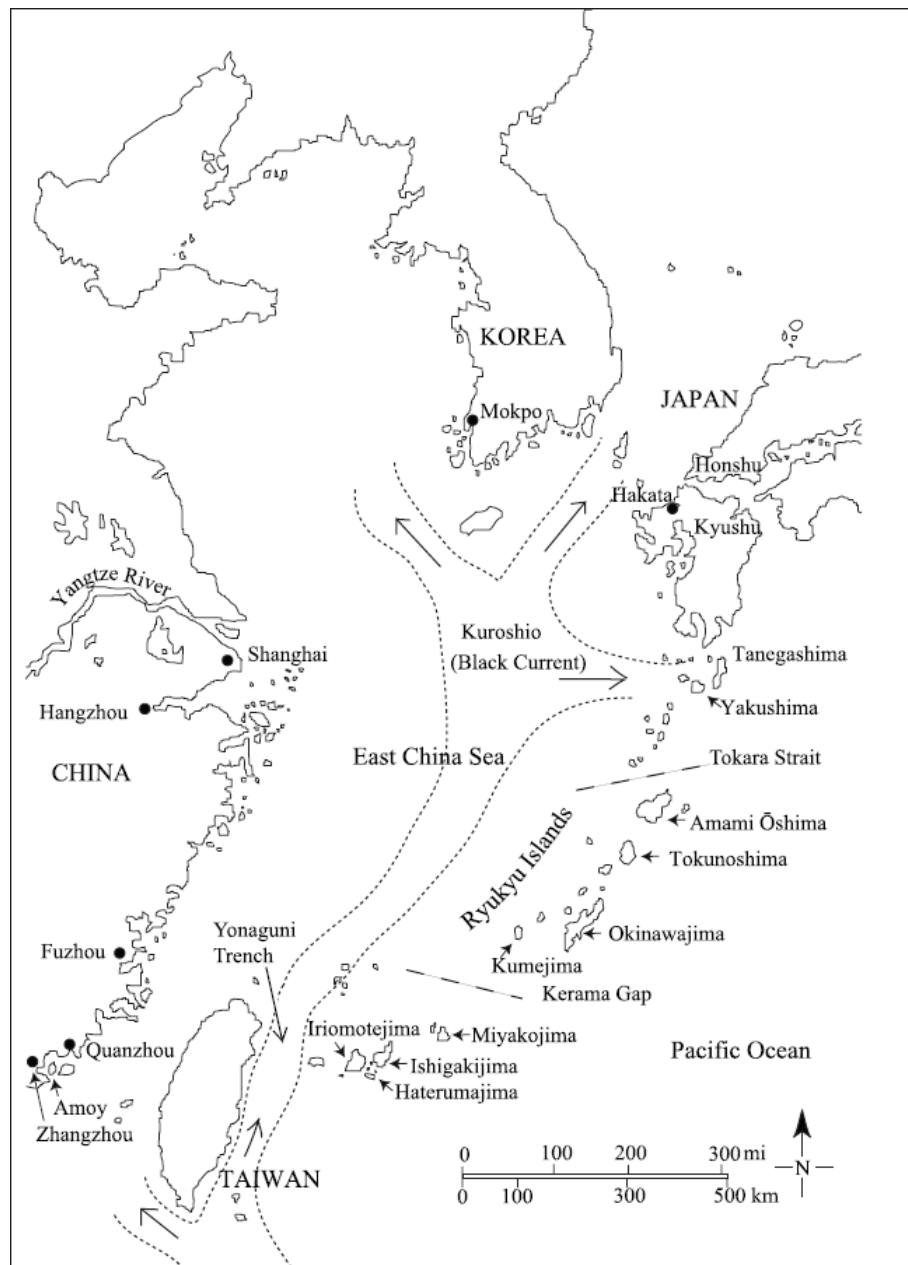


Figure 11: The Ryūkyū islands and East Asia (from Pearson 2013:2)

Archaeological research has found that the Jōmon populations did not settle south of the 250 km stretch called Kerama Gap between Okinawa and the southern Ryūkyū islands called Sakishima Islands. Instead, people from Taiwan and/or Southeast Asia came there around 2.300 BCE. In the period between 1.500 and 800 BCE there are no archaeological signs of settlement in the southern Ryūkyū islands, suggesting that the islands were abandoned<sup>38</sup>. The next settlement period from 800 BCE to 1.100 CE was characterized by *Tridacna* shell adzes and the absence of pottery. This

<sup>38</sup> For Pearson this “appears to indicate that the original colonizing group died out and the islands were recolonized” (Pearson 2013:81).



was followed by the spread of the Gusuku Culture from Japan, bringing “agriculture, the contemporary Ryukyuan languages and new cultural items such as iron and Chinese ceramics” (Hudson 2012:258; Hudson 2017:191). Pearson classifies the first phase as the Shimotabaru Period from 2.900 to 2.000 BCE, the hiatus period from 2.000 to 900 BCE and the subsequent Non-Ceramic Period from 900 BCE to 1.100 CE (Pearson 2013:79).

The first phase coincides with the Austronesian settlement originating in Taiwan and is therefore believed to represent an Austronesian settlement in the southern Ryūkyūs (Hudson 2012:259–260; Summerhayes and Anderson 2009:88). However, “there was no contact between the two cultural zones of the southern and the central/northern Ryukyus in prehistory” (Hudson 2012:261).

Peter Bellwood has suggested that the early settlers from Taiwan in the southern Ryūkyū islands could also have been speakers of a Pre-Austronesian language, because “the Neolithic cultures of the southern Ryūkyūs display some striking differences from other prehistoric Austronesian cultures in Southeast Asia and the Pacific” (Hudson 2017:195).

Archaeological evidence thus tells us that there may have been Austronesians settling in the southern Ryūkyū islands in prehistory times. However, they did not venture further to the north and can thus be excluded as possible source for the Japanese language. The Japonic language family settled the southern Ryūkyū islands from Kyūshū during a later period (Pellard 2015:31).

In this section I have shown that a southern origin of Austronesian elements through the Ryūkyū islands is not supported by archaeological data. I will now turn to possibilities of a northern route through the Korean peninsula. This is essentially the route that the Japanese rice supposedly took; from the Yangtze River Delta via the Korean peninsula into Kyūshū, Japan. For this it is also important to discuss the millet agriculture that was predominant in the Korean peninsula in prehistory.

## **6.7. Rice and millet agriculture in the Korean peninsula**

In China there were two main independent cultural centers where the transition from foraging to farming took place; the middle Yangtze Valley based on rice (*Oryza sativa*) and the middle Yellow Valley based on foxtail millet (*Setaria italica*) (Lu 1998:277–278; Bellwood 2005:20). In prehistoric South China the indigenous foraging culture and the farming culture from the Yangtze River Valley seem to have interacted and co-existed over an extended period of time (Lu 2012:131).

From the beginning of agriculture in China around 8.000 BCE, there was a basic separation in the northern parts with millet agriculture and southern regions with rice agriculture (see Figure

12, left). These two subsistence systems became integrated into a single agricultural system around the year 4.000 BCE, which led to the spread of agricultural systems accompanied by population growth (Stevens and Fuller 2017:152).

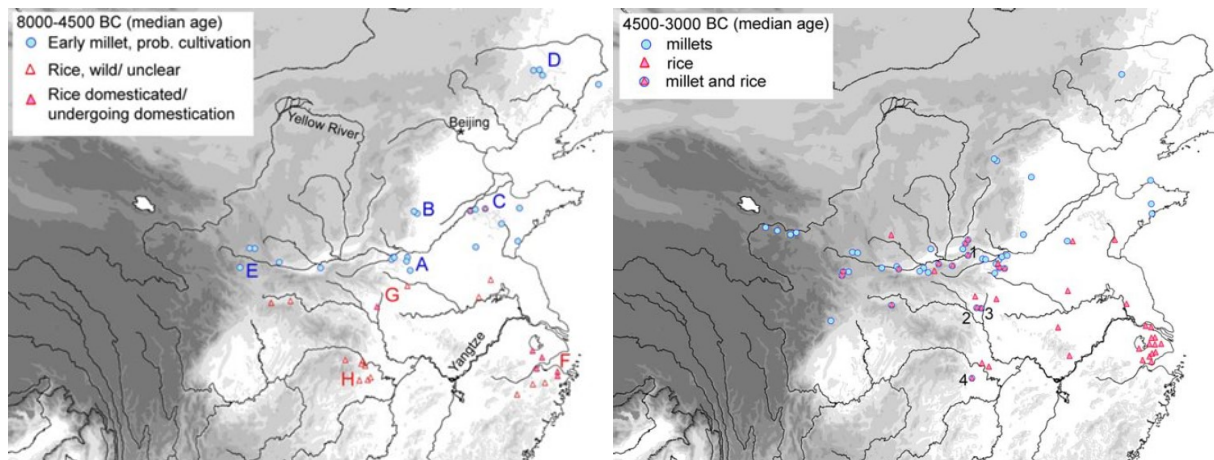


Figure 12: Distribution of early sites with archaeobotanical finds of millet and/or rice with median ages between 8.000 and 4.500 BCE (left) and 4.500 and 3.000 BCE (right) (from Stevens and Fuller 2017:158, 167)

The domestication process of rice took several millennia and evidence indicates that full domestication was reached around the year 4.000 BCE in the lower Yangtze area (region F in Figure 12, left). This area focused solely on rice agriculture until 2.000 BCE and did not show any evidence for cultivation of millets or soybeans (Stevens and Fuller 2017:166–168).

In the period between 4.000–3.500 BCE millet farmers took up rice farming, which gave rise to systems based on the integration of millet and rice agriculture (region 1 in Figure 12, right). From there, this new system spread to the west and the south in the following centuries in the vicinity of the Yellow River (Stevens and Fuller 2017:166–168). The eastward spread occurred after 3.500 BCE and it reached lower Yangtze around 2.500 BCE and the spread of this integrated system to Taiwan and possibly to coastal southern China likely started around 2.500 BCE via maritime routes (Stevens and Fuller 2017:168–169).

Nasu and Momohara assume that “rice and millet cultivation were simultaneously introduced as a set, part of the agricultural complex into the existing Jomon subsistence economy” from China via Korea during the initial Yayoi period (Nasu and Momohara 2016:504, 510). This combined millet and rice subsistence system was mainly found in the Shandong peninsula off the western coast of Korea (see Figure 13).

Apart from the wet rice agriculture, Robbeets sees connections to the supposedly Austronesian people(s) of the lower Yangtze River Valley such as “ritual tooth ablation [...], tattooing with dragon figures to ward off monstrous fishes [...] and granaries with raised floors, curved roof-lines

and gable horns” (Robbeets 2017:221)<sup>39</sup>. She explains these connections as a borrowing context and locates the Austronesian populations on Shandong peninsula. In her view, the “homeland of Japonic<sup>40</sup> was situated on the Liaodong Peninsula between the third and second millennium BC” (Robbeets 2017:242). She links them to the millet farming people of the Liaodong area to shared Proto-Transeurasian (Macro-Altaic) vocabulary for cultivation and weaving (Robbeets 2017:222).

Accurately dating the introduction of rice and millet agriculture in Korea and Japan is difficult, because the available data is not sufficient. Finds of foxtail millet, barley, rice, wheat, hemp and legumes at Daechonri site (number 10 in Figure 13) are problematic “[b]ecause of an incorrect identification and a lack of direct accelerator mass spectrometry (AMS) dates on these crop remains.” These finds may therefore be more recent than previously thought (Lee 2011:313). Other sites in Korea also have dating problems and the earliest reliable evidence points to a date in the late 2<sup>nd</sup> millennium BCE (Stevens and Fuller 2017:171).

The earliest archaeobotanical remains of millets in Japan stem from the Nabatake site (Initial Yayoi). Dating of carbonized common millet was done at Ryugasaki A site, Shiga prefecture (801–555 cal BCE) and carbonized foxtail millets were dated to 794–552 cal BCE at Kitashirakawa-Oiwakecho site, Kyōto prefecture (Nasu and Momohara 2016:507). Thus, both millet and rice can be connected to the Yayoi immigrants who came to Kyūshū at the start of the Yayoi period.

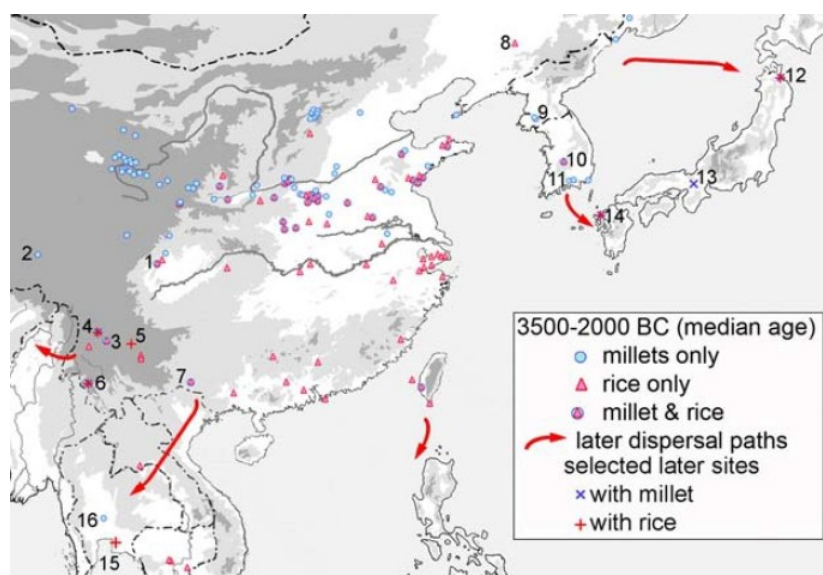


Figure 13: Distribution of sites with archaeobotanical finds of millet and/or rice with median ages between 3.500 and 2.000 BCE (from Stevens and Fuller 2017:169)

<sup>39</sup> See section 4.5 for further information on the native population of the lower Yangtze River Valley.

<sup>40</sup> Robbeets follows Janhunen and labels the “historical varieties of the Japanese language spoken on the Korean Peninsula” as “Japonic” (Robbeets 2017:211, note 1).

## 6.8. Conclusion

Correlating archaeological findings with reconstructed words linked to subsistence has only partly been helpful for determining the origins of the Japanese language. This is due to the general problem of lexical comparisons, namely that similarities in vocabulary can be explained both by a genetic relationship of the languages but also simply by language contact and borrowings. In addition to that, there is not enough material available for the Korean peninsula and the Japanese archipelago to make detailed assumptions about the development of agricultural systems in those areas. However, archeological data does provide research with possibly trajectories of prehistoric population movements which can be used to create new hypothesis for how the languages of East Asia developed.

It also ties the Japonic language family to the Korean peninsula before the start of the Yayoi period. How the relationship between Proto-Japonic and Proto-Koreanic looked like is impossible to tell. Janhunen has proposed that “[...] on the Korean Peninsula, two linguistic entities, Proto-Koreanic and Proto-Japonic, coexisted until the latter relocated to the Japanese Islands” (Janhunen 1998:206).

The fact that millet and rice appear in Japan roughly during the same time period suggests that a subsistence system of millet and rice agriculture was introduced at the start of the Yayoi period and thus seems to rule out a direct immigration from the Austronesian speaking regions of the southeast China coastal areas. However, Austronesian elements could be explained by a northward expansion of Austronesian speakers into the Shandong peninsula, from where they eventually moved to Japan. Moreover, I want to point to the possibility of a (Pre-)Austronesian immigration to the Korean peninsula, where they integrated millet agriculture into their wet rice-based subsistence system and subsequently moved to Japan.

As I have shown in this chapter, the origins of the rice agriculture in combination with millet cultivation plays an important role for the immigration movements during the Yayoi period. It remains to be seen where the contact of these two elements and associated vocabulary in the Japanese language has occurred, but it seems plausible that this happened before the start of the Yayoi period outside of Japan. It seems plausible that a subsistence system based on rice and millet cultivation then moved to Japan from the Korean peninsula at the start of the Yayoi period.

## 7. Mythology

Mythology is an important source for the origins of the Japanese people. Through comparative mythology, Japanese myths can be compared with mythology from other areas in Japan's vicinity. In this chapter I will discuss some important mythological stories of ancient Japan and consider their importance for the origins of the Japanese language. It will also be important to carefully consider the context in which Japanese mythology was written down and distributed as political motivation may have played a big role in how they were presented to the public.

The earliest sources on Japanese mythology are found in the *Kojiki* and the *Nihon Shoki*. In many instances, both books contain variations of the same mythological stories. The writing of the *Kojiki* was ordered by imperial command and completed by Ō no Yasumaro 太安万侶 in 712 CE (Philippi 1969:43–44). It is divided into three volumes, the first of which is chiefly concerned with the mythological beginnings of the Japanese state. In this chapter I will focus mainly on the versions recorded in the *Kojiki* and discuss additional information from the *Nihon Shoki* or *Fudoki* if needed.

According to Robert F. Wittkamp, Japanese myth can mainly be organized into two distinct subgroupings. These two branches of traditions are often referred to as the “southern line (system) *nanpō-kei* 南方系” (also called Izanagi-Izanami line) and the “northern line (system) *hoppō-kei* 北方系” (also called *musubi* line) (Wittkamp 2018:50).

Wittkamp thinks that the northern and southern lines represent myths that came to Japan during different time periods and potentially came from different areas. He defines the southern line in the following way:

The southern line appears to be the older system, with origins traced back to the Yayoi period, more than two thousand years ago. Consequently, this line is considered to be autochthonous, as opposed to the younger system from the north. Notable examples in *Kojiki* that attest to the myths of the southern system are the story of the white or naked rabbit from Inaba, an episode of the so-called Izumo myths (*Kojiki*), the slaying of Ōgetsu Hime by Susa no Wo, which is connected to the Hainuwele myth from Indonesia, and the island fishing (*kunibiki* 国引き). (Wittkamp 2018:50–51)<sup>41</sup>

He connects the myths of the southern line with the powerful *uji* 氏 families of the countryside (*omi* 臣, 君/公 *kimi* and *kuni no miyatsuko* 国造 groups). The northern line myths are of the ruling elite of the emperor and the closely affiliated *uji* groups that were serving the ruling family

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<sup>41</sup> The island fishing myth is recorded in the book “Izumo” of the *Fudoki* 風土記, but the island fishing motif can also be seen in the island of *Onogoro* – the first island to be created by Izanagi and Izanami (Wittkamp 2018:50–51).

(*muraji* 連 and *banzō* 伴造) (Wittkamp 2018:50–51). The northern line represents a differing ideology:

By contrast, the northern system is much younger. It presumably arrived in the Japanese islands during the fifth century, when great turbulence and migration governed northeast Asia. [...] [The] myths of the nomads and tribes from northeast Asia reached Japan via the Korean peninsula. While the southern line is described as governed by a horizontal world view, the northern line by contrast is connected with the idea of a vertical world view, i.e. the idea that a spirit or god in heaven created the earth beneath by himself or ordered the creation. Representatives of these myths in the *Kojiki* are the *musubi* spirits, such as Takami Musuhi and Kamu Musuhi, who appeared in the beginning of the cosmogony. (Wittkamp 2018:51)

It appears as though the compilers of the *Kojiki* were trying to incorporate local groups into the myth to include them into the emperor's line and thus legitimize the emperor's rule over them. This created a symbolical affiliation with the emperor's line that was important for those groups (Wittkamp 2018:58–59).

In the following sections, I will focus on the southern and northern lines as defined by Wittkamp. In simple terms, the northern line refers to the ruling elite of the Japanese kingdom of the 7<sup>th</sup> and 8<sup>th</sup> centuries, while the southern line represents the indigenous population. A structured analysis of the Japanese myths will provide information to help contextualize the myths and serve as a basis for determining what language these myths can be related to.

In the following sections, I will give a short summary of the main stories and briefly discuss available literature and opinions on the interpretation of those sections and classify them into one of the two categories outlined by Wittkamp.

## 7.1. Creation myth

The *Kojiki* records the creation of life from the first chapter in the first book. In *Takama-no-para* 高天原 three deities came into being: *Ame-no-minaka-nushi* 天之御中主, *Takami-musubi* 高御産巢日 and *Kami-musubi* 神産巢日. They were followed by another two deities and eventually by seven generations of deities, the last of which were *Izanagi* 伊邪那岐 and his spouse *Izanami* 伊邪那美.

Izanagi and Izanami received a heavenly spear from the other deities and were entrusted to solidify the land floating like oil and jellyfish. Standing on a floating bridge they lowered the spear and stirred with it. Upon lifting it, drips fell down and created the island called *Onogoro* where they descended onto and created a heavenly pillar and a palace.

After a first failed attempt, they were able to create land by walking in a circle around the pillar. They created the first eight islands called *Opo-yasima-guni* 大八嶋國, followed by another six islands.

There are a number of important motifs contained in this myth which I will consider in the following paragraphs. I will first outline motifs that can be allocated to the southern line and then discuss possible relation to northern line myths.

Chadwick compared themes of Polynesian legends with Japanese myths and pointed out resemblances. He assumed that there were several systems incorporated into the cosmogony of the Japanese chronicles. In general, the Polynesian creation myth is similar to that of Japan (Chadwick 1930:427–429).

In both the act of creation is represented as a generative process which takes place between divine parents. In both the process of creation is chiefly narrated in relation to gods and islands, and stress is laid on the “birth” of rocks, mountains, and islands for which elaborate pedigrees are furnished. There is a marked absence in both systems of interest in the animal or vegetable kingdoms, and a preoccupation with the elements. (Chadwick 1930:429)

Ōbayashi Taryō points out that the motif of the ‘drifting island’ is most widespread in East Asia (Korean peninsula and coastal area of eastern China), Indonesia and Polynesia and probably originates in the eastern coastal region of China (Ōbayashi 1977:3–4). He thinks that this culture from the lower reaches of the Yangtze River probably came to Japan in the latter part of the millennium BCE either directly or via the Korean peninsula and made up the main component of the Yayoi culture (Ōbayashi 1977:22).

Other similarities with southern myths are the Izanagi-Izanami myth, which closely matches the Southeast Asian flood myths of the “brother-sister ancestry type” (Ōbayashi 1977:5). Edwina Palmer elaborates on this by adding that Jōmon Japanese “had migrated in response to the ‘flooding’ of Sundaland” – a landmass and former continent which now constitutes the islands of Southeast Asia (most of present-day Indonesia and the Malay peninsula) – and thereby left their original homeland. The flooding of the Sunda-Sahul around 8.000–6.000 BCE also led to an increase in inhabitable area of the crocodile. This is how the water creature of the *wani* entered Japanese myths (Palmer 2010:9–70).

Other aspects of the Izanagi-Izanami myth may belong to the northern line. Nelly Naumann connects the wedding palace and the heavenly pillar ceremony of Izanami and Izanagi (“Acht-klafterhalle”) to the old Chinese *ming-t’ang* – a place where vassals gather for announcements from the emperor. She also draws a parallel to importance of this kind of building and the number eight in the myths of the Izumo area. The Izumo-culture resembles “late Daoism” of the centuries

around the year 0 in the coastal areas of China. It is similar to the culture in Lang-ya (Shantung) during the Han period (Naumann 1988:60–61).

## 7.2. The three noble children

Izanagi bears three children, the siblings of sun (female), moon (male) and at last, the malicious brother Susanowo. According to Ōbayashi, this mythologeme seems to have developed from a common Austroasiatic basis of sun and moon as siblings (Ōbayashi 1960:39–40), but is also be found in the indigenous myths of Korea (Ōbayashi 1960:22). Hence, it can not clearly be identified as a southern line myth.

The figure of Susanowo is also ambiguous. On the one hand, his function as “rain-storm god” can be compared with the account of the “wind-storm god” Tāwhiri-matea and the “wind god” Tāwhaki of Polynesian Māori mythology (Chadwick 1930:430). On the other hand, Susanowo is also an important deity in the Izumo myths and worshipped in many shrines in the Izumo area (Piggott 1989:58). Researchers have pointed out similarities between Izumo myths and that of the Silla kingdom. The Susanowo cult is considered to have derived from the Sillan god of metal craftsmen (Piggott 1989:49).

### 7.2.1. Susanowo, Amaterasu and their offspring

Susanowo and Amaterasu agreed to bear children to test his sincerity. Amaterasu bore three female deities from Susanowo’s belongings<sup>42</sup> and Susanowo created five male deities from Amaterasu’s belongings by chewing on them and spitting them out. Having proven his pure intentions, Susanowo “raged with victory” (Philippi 1969:79).

Ōbayashi classifies this as the Ukehi myth and also points out the dual-creation myth where two deities compete by creating deities of their own gender. He connects it to Iranian mythology and concludes that it must have come from west Asia via Siberia and Korea (where traces of this myth can also be found) to Japan (Ōbayashi 1977:13–14). Therefore, this motif can be considered to belong to the northern line myths.

### 7.2.2. The heavenly rock cave

Amaterasu locked herself in a rock-cave and as a result the heavens and the lands went completely dark. All the deities gathered in the river-bed of *Ame-no-yasu-no-kapa* 天安之河原 where they performed divination with various items such as a mirror, strings of *magatama* beads, a whole

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<sup>42</sup> All three of them are enshrined in Munakata near present-day Fukuoka.



shoulder-bone of a deer and heavenly wood. *Ame-no-uzume-no-mikoto* became possessed and exposed herself, whereupon *Takama-no-para* and all the deities laughed and Amaterasu opened the heavenly rock-cave door in surprise. The heavens and lands became light again and Susanowo was expelled.

Michael Witzel compares this “Myth of the Hidden Sun” with an Indian version recorded in the Rigveda (ca. 1.200–1.000 BCE) (Witzel 2005:2–3). He analyzes the main elements of the myth and connects it to other cultural spheres:

The myth relates the disappearance of the sun (or the deity of the sun) in a cave or some other enclosure, and its re-appearance (often as Dawn) after the intervention of a group of gods (and others), creating (or restoring) light and prosperity to the world. It is found in various forms in Vedic Indian, Greek, Japanese, Ainu, Amerindian and South-East Asian sources, and in an aberrant version even with the Hawai’ians. (Witzel 2005:3)

Interestingly, among those versions, the Japanese one is the one closest to that of the Vedic Indians (Witzel 2005:5). This myth features some very basic concepts and may thus be considered to have evolved individually in various cultures. However, as Witzel points out, the myth’s distribution coincides with the areas that have been associated with Eurasian (Laurasian) mythology and are not found in Australia or sub-Saharan Africa (Witzel 2005:3–4). Witzel therefore surmises that a comparison of the Indian and Japanese variants of the myth “establishes without doubt the common origin of both versions,” although they were recorded in a very different time and space (Witzel 2005:39). He assumes that the early Indo-Iranian area was around the Central Asian steppe belt in ca. 2.000 CE and interacted with speakers of the Uralic and Yeneseian language families of the area. Evidence for this close geographical connection is provided by early loan words from early Uralic and Yeneseian. These people also lived close to the people of the eastern steppes – an area where the Puyō and Koguryō would eventually come to power. Witzel states that speakers of pre-Koguryō-Japonic and pre-Vedic could therefore have been in contact somewhere around the Altai mountains and Manchuria before ca. 1.500–1.000 BCE and thus the speakers came to Japan with the Yayoi immigrants (Witzel 2005:60). Therefore, this myth should have come to Japanese from the north with the northern line myths.

### 7.2.3. Food production

Susanowo asked Ōgetsu Hime (Uke Mochi) for food, which she produced for him from her nose, mouth and rectum. She prepared the food in several ways and offered it to Susanowo. Thereupon he killed her, because he thought she had polluted the food before presenting it to him. From the corpse of Ōgetsu Hime grew different foods. In her head grew silkworms, in her eyes rice

seeds, in her ears millet, in her nose red beans, in her genitals wheat and in her rectum soy beans. These were used as seeds by Kami Musubi (Philippi 1969:87).

According to Ōbayashi, the myth where agricultural crops emerge from a corpse can be considered as the Hainuwele-mythologeme (Ōbayashi 1977:8). This motif can be considered to belong to the southern line, as it is widely found in Indonesia and South China. A notable difference to the Japanese myth is the type of plants in the myth. While in Japan the rice plant and dry field crops developed that way, it is taros and yams in Indonesia and in southern China they often comprise betel, opium and tobacco (Ōbayashi 1977:10–11). He states that this “millet cultivation type of swidden agriculture [...] entered Japan from the southern part of China around the end of the Jōmon [...] period” (Ōbayashi 1977:22)<sup>43</sup>.

### 7.3. White rabbit of Inaba

The god Ōkuninushi is central to myths related to the Izumo-region (Antoni 2015:62). Ōkuninushi (henceforth called Ōnamuchi in the *Kojiki* entry) had eighty brothers who were all deities<sup>44</sup> and all wanted to marry Yagami-hime of Inaba. Together they went to Inaba and took along Ōnamuchi as a servant to carry their bags. When they arrived at the Cape of Keta, they found a furless rabbit lying on ground. They recommended that he should bathe in salt water and lie on a mountain ridge where the wind blows, which made the condition of the rabbit even worse.

The rabbit told Ōnamuchi that he wanted to cross over to the mainland from the island of Oki by deceiving a crocodile. He did so by telling the crocodile to assemble its relatives in a line in the water to find out who has more relatives. Thereafter, the rabbit ran across and counted the crocodiles as he stepped on them. When he reached the last one, about to go on land, he told the crocodile that he had deceived it. Just as he had finished talking, the last crocodile seized and skinned the rabbit. Ōnamuchi offered advice to help the rabbit and so the rabbit’s body healed. Because of that, Yagami-hime declined the wedding offers of the eighty deities and wed Ōnamuchi (Philippi 1969:93–95).

Edwina Palmer also sees the origin of this myth “in the region of Sulawesi, the Moluccas or New Guinea, where the contest is between an ape and a crocodile.” The two animals featured in the myths differ quite drastically, but they are always a land animal and an animal from the sea (see Figure 14). Considering that the land animal in the myth’s version from South China is a

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<sup>43</sup> In contrast, Naumann does not consider this myth to be the Hainuwele myth and assumes that the plants and animals are mentioned in relation with body parts based on puns (Naumann 1996:62).

<sup>44</sup> The number eight has a cosmological meaning and expresses totality (Naumann 1988:60). This may therefore also be read as “all the other deities.”

turtle, she suggests that the myth came directly from Southeast Asia, which would explain why the Japanese myth features a crocodile-type creature. She concludes that the myth likely came to Japan during the Jōmon period (Palmer 2010:72-73).

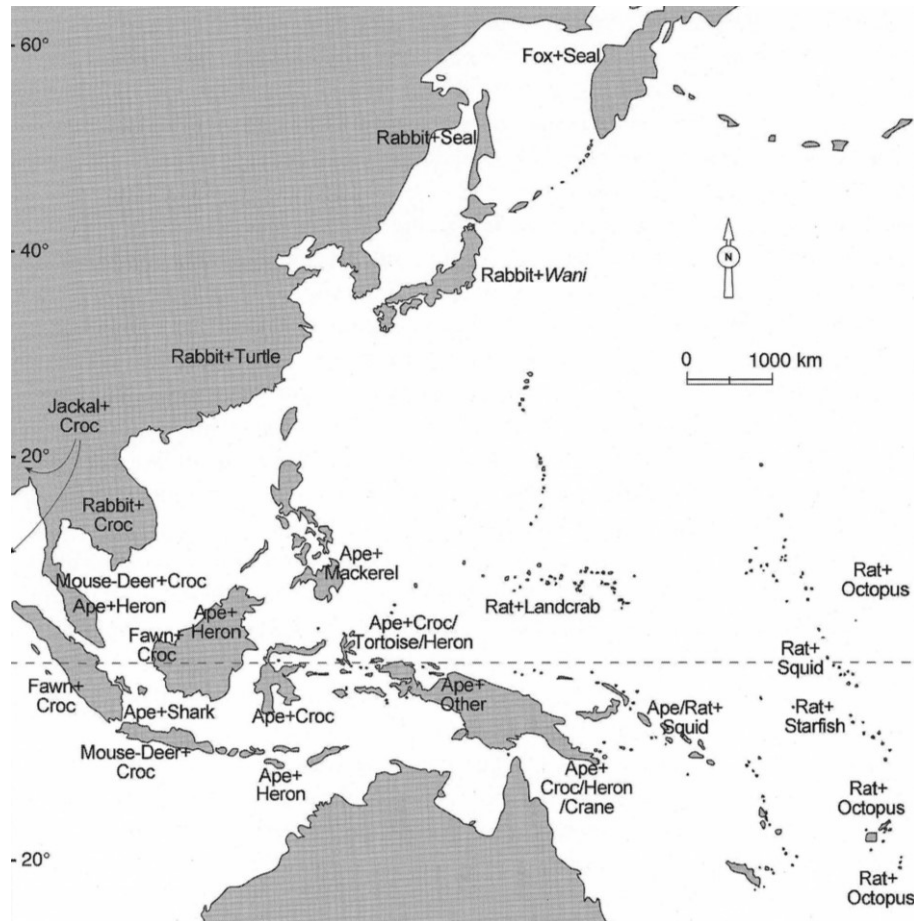


Figure 14: Distribution of the "White Rabbit of Inaba"-type myth (from Palmer 2010:71)

The majority of variants of this myth comes from the Javanese traditions of Indonesia, but a pre-Indian origin of the tales seems likely, because impact from India via the “Hindu-Javanese high culture” is generally seen in Indonesian folk tales (Antoni 2015:63–64). An important role is also attributed to the crocodile in the story, which Antoni interprets as the “deity of both death and of return” (Antoni 2015:65). This function can be seen in the Japanese myth through the skinning of the rabbit. The Indonesian versions have turned to a fairy tale-like happy ending, where the land animal escapes the sea creature (Antoni 2015:69). This suggest that the Inaba myth belongs to the southern line.

## 7.4. Heavenly descent

The stories about Ōkuninushi end with a section that shows “the process by which Japan was ceded to the offspring of the heavenly deities.” This descent from heaven forms the focus of the mythological narrative of the *Kojiki*. Philippi states that this section has mostly been interpreted to show the gradual occupation of Izumo by the Yamato kingdom. Another possibility is that Izumo was one of the last areas to be conquered and thus “became representative of all the territories which had been attached to the [Yamato] possessions” (Philippi 1969:120, note 1).

### 7.4.1. Ninigi

After the pacification of the “Central Land of the Reed Plains” 葦原中國 had been concluded, the grandson of Amaterasu and Takami-musubi, Hikoho no Ninigi no Mikoto 日子番能邇邇藝命 (henceforth Ninigi) was entrusted to descent down from the heavens and rule the lands. The earthly deity Saruta Hiko 猿田彦 served as his guide. Amaterasu gave Ninigi the three imperial regalia *magatama* beads (*Yasakani* 八咫瓊曲玉), the mirror that was used to lure Amaterasu out of the rock cave (*Yata* 八咫鏡) and the sword *Kusa-nagi no Tsurugi* 草薙劍. She also sent with him several deities, which were installed in certain offices (Philippi 1969:137–140).

Ninigi descended from the heavens to the peak of mount Takachiho of Hyūga in Tsukushi<sup>45</sup>. Ninigi said that his land is opposite of the land of *Kara* 韓國<sup>46</sup>. Going through the Cape of Kasasa<sup>47</sup>, he dwelt in a land where the evening sun shines. There he built his palace and lived (Philippi 1969:141).

The heavenly descent motif can be considered as a northern line myth and is similar to the myth of Tan’gun 檀君 the legendary founder of first Korean kingdom of Chosŏn (Ōbayashi 1977:16).

In ancient times Hwan-in [...] had a young son whose name was Hwan-ung. The boy wished to descend from heaven and live in the human world. His father, after examining three great mountains, chose T’aebaek-san (the Myohyang Mountains in north Korea) as a suitable place for his heavenly son to bring happiness to human beings. He gave Hwan-ung three heavenly treasures, and commanded him to rule over his people. (Ha and Mintz 1972:32)

Hwan’un then married a woman and their child King Tangun was born (Ōbayashi 1984:173). Just as in the Japanese version of the myth, the founding figure descends onto a mountain from

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<sup>45</sup> Florenz associates this with Mount Kirishima in southern Kyūshū (Florenz 1919:72, note 2).

<sup>46</sup> Korean peninsula. The gloss *kara* is likely based on the name of the southern Korean Kaya confederacy.

<sup>47</sup> Florenz suggests Kaseda 加世田市 in Ata district, Satsuma province (now merged with Kasasa 笠沙町, Kinpō 金峰町, Bōnotsu 坊津町 and Ōura 大浦町 to form Minamisatsuma 南さつま市 in south-western part Kagoshima prefecture) (Florenz 1919:72, note 9).

heaven. Ninigi and Hwan'ung both descend with the three regalia, which seems to be most closely related to the ruling aristocratic cultures of Japan and Koguryō (Ōbayashi 1984:173, 179).

Yoshida Atsuhiko thinks that “Japanese mythology reflects on the whole a characteristic world view originating from the Indo-Europeans, which Georges Dumézil called the trifunctional system” (Yoshida 2015:79). According to Littleton, this tripartite ideology is reflected in the imperial regalia (mirror, sword and beads) and was brought to Japan via the Korean peninsula from the Asian mainland (Littleton 1995:263). This view is also shared by Ōbayashi, who argues that the similarities in the kingship myths of the Indo-Europeans and Japan stem from the “ruling-class culture that came into the country by way of the Korean peninsula with the Altaic pastoral culture as an intermediary” (Ōbayashi 1977:22–23).

#### 7.4.2. Ko no Hana Sakuya Hime

At the Cape of Kasasa, Ninigi met Ko no Hana Sakuya Hime 佐久夜毘賣. When Ninigi asked her father the mountain deity Ōyamatsumi 大山津見 for the hand of his daughter, the mountain deity gave a great feast and also gave Sakuya's older sister Iwanaga Hime 石長比賣 to Ninigi. Ninigi refused Iwanaga Hime because of her “exceeding ugliness” and had conjugal intercourse with Sakuya Hime (Philippi 1969:144–145). Ōyamatsumi spoke:

The reason why I offered both of my daughters together was this: I presented them swearing an oath that, if he should employ [Iwanaga Hime], the life of the child of the heavenly deities, even though the snow should fall and the wind should blow, should be ever like a rock, and should continue eternally, firmly, without being moved; and also that, if he should employ, [Sakuya Hime], he should flourish, just as the blossoms of the trees flourish. However, now that he has returned [Iwanaga Hime] and kept only [Sakuya Hime], the life of the child of the heavenly deities shall continue only for the interval of the blossoming of the trees. (Philippi 1969:145)

Sakuya Hime got pregnant and Ninigi, upon hearing about it, did not believe her. “Can [Sakuya] have become pregnant after only one night? This is not my child; surely it must be the child of an earthly deity” (Philippi 1969:146).

Stating that if her children were of earthly deities, they would not be born safely, Sakuya proved Ninigi's fatherhood by giving birth to three deities: Hoderi 火照 (ancestor of the Kimi of Ata 阿多 of the Hayato 隼人, see 8.1.3 for further information), Hosuseri 火須勢理 and Howori 火遠理 (Philippi 1969:146–147).

Ōbayashi considers this myth centered around the brevity of human life of the “Bloom-Lady and Rock-Lady” to be an independent folk-tale that was later added to the myth-cycle centering around Ninigi. The motif can also be found in Southeast Asia and Oceania, as well as among the

Atayal of Taiwan (Ōbayashi 1966:2–3, 5). An Indonesian variant in Central Celebes resembles the Japanese version the closest:

Man lived first on a gift tied to a rope and sent from the creator in heaven, but one day he gave a piece of stone. The first parents said to the god, “What shall we do with this stone?” They asked for something different from stone. The god pulled up the stone, and instead gave them bananas. They rushed to the fruit and ate. Then a voice from heaven was heard: “Since you chose bananas, your lives will be like those of bananas. When a banana tree has fruits, the parent-tree dies. So will be your lives, and when you die your children will replace you. Should you have chosen the stone, your lives would continue perpetually like that of stone.” (Ōbayashi 1966:4)

This so called Banana-type or Banana Tree myth centers around the origin of mortality, where “the first humans were born from vegetation—especially the banana tree; they were originally immortal; that at some point they had the choice of becoming permanent as rock or short-lived as vegetation” (Palmer 2010:75–77). Ōbayashi thinks that this myth “originally appeared in an earlier layer of agricultural (probably Pre-Austronesian) culture in Southeast Asia” and was brought to Japan by the ancient tribes of Southern Kyūshū called Hayato<sup>48</sup>. The bananas in the myth were changed to flowers during its distribution (Ōbayashi 1966:7). This myth therefore corresponds with the southern line.

## 7.5. The magical fish hook

Howori had tools for hunting in the mountains and his elder brother Hoderi had tools for hunting in the sea. One day, Howori suggested that they should exchange their tools,<sup>49</sup> but even with the sea tool, Howori was unable to catch any fish and eventually lost the fishhook in the sea. Thereupon, Hoderi requested to get his original fish hook back, but Howori was unable to provide it.

The deity Shiotsuchi 鹽椎 found Howori lamenting at the seashore and thereafter sent Howori to the palace of the sea deity Watatsumi 綿津見 in a small boat made from bamboo. After Howori arrived, he entered the palace and meet the daughter Toyotama Hime 豐玉, who he then married (Philippi 1969:150–152).

Howori told the sea deity that he had lost his brother’s fish hook. Upon hearing this, the sea deity assembled all fish and questioned them. The fish hook was found in the sea-brems mouth and was given to Howori. Upon returning, Shiotsuchi gave Howori two jewels and instructed him to use them to control the tides to infuriate his brother. Howori was then escorted

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<sup>48</sup> Sometimes transcribed as Hayahito.

<sup>49</sup> Philippi and Florenz translate as “luck” instead of “tool” (*sachi* 佐知 in the *Kojiki*), Akima has “magic tools” (Akima 1993:103).

back by a crocodile<sup>50</sup>. He did as he was told by the sea deity and thereby aggravated his brother, causing him anguish and suffering. Hoderi then vowed to serve Howori as his guard (Philippi 1969:153–155).

Toyotama followed to the seashore and gave birth to Ugayafukiaezu 鵜葺草葺不合 by transforming into a crocodile. Upon realizing that Howori had witnessed her transformation, Toyotama became ashamed and went back to the sea, leaving her child behind. She then sent her younger sister Tamayori Hime 玉依 to look after the child (Philippi 1969:155–157).

For Ōbayashi this is the story of a “sea figure” (the elder brother) and a “land figure” (the younger brother) who are on a journey to find new lands. While the elder brother fails and dies, the younger brother founds a kingdom (Ōbayashi 1977:17). According to Palmer, the two brothers Hoderi and Howori and their association with the sea and the mountains respectively “precisely reflect the Indonesian symbolism”. On the Indonesian island of Bali these two elements are contrasted – the mountains signify the home of the gods and the sea represents the habitat of the demons. Therefore, just as in the Japanese myth, the mountains have a positive connotation, while the sea has a bad one (Palmer 2010:80).

Another similarity is the animal found in a version of the fish hook myth from Central Timor. The Sea King is said to be the “King of the Crocodiles” – a *wani* is also the animal that brings Howori back to his original home and also the original form of the Sea King’s daughter which is revealed when she gives birth (Palmer 2010:79). Here we can also see a possible connection to the coastal cultures of southern China, where the crocodile is “linked to the conception of a living carrier to the otherworld” (Antoni 2015:65). Shinoda Chiwaki classifies myths centered around monkeys, hares, crocodiles or turtles to be of a southern, maritime tradition (Shinoda 2008:63). This myth can therefore be classified as southern line myth.

The capitulation of Hoderi, the ancestor of the Hayato people, to his younger brother Howori can also be interpreted to show the subjugation of the Hayato people by emperor Jinmu (Akima 1993:158). The *Nihon Shoki* gives Jinmu the personal name of Hiko-hohodemi, which is also another name for Howori in the *Kojiki*. Therefore, Jinmu and Howori may have been the same figure (Naumann 1996:182). Naumann explains that it was politically necessary to integrate the myths of southern Kyūshū into the genealogy of the ruling house of the Yamato court.

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<sup>50</sup> In Modern Japanese a *wani* 鰐 is a crocodile, but in the mythological context it may also denote a dragon, sea-monster (Aston 1972:61, note 3), shark or crocodile (Philippi 1969:407; Antoni 1982:46). I have chosen to translate this term as crocodile.

## 7.6. The eastern expedition by Emperor Jinmu

Kamu-yamato Iware-biko 神倭伊波禮毘古 (later renamed to Jinmu Tennō 神武天皇) and his elder brother Itsuse 五瀬 were living in the palace in Takachiho and decided to travel eastward to govern the kingdom peacefully. On the way, Itsuse was wounded and eventually died. On his way, Jinmu was helped by a person riding on a tortoise to navigate the waters, encountered a bear and was guided by a crow to find his way to Yamato, from where he ruled the kingdom (Philippi 1969:163–177).

The myth of the founding of the Japanese empire by Jinmu resembles the founding myth of Koguryō and Puyō as well as the myth of the origin of Paekche. Ōbayashi points to the three animals the emperor encounters on his way, which represent the sea (tortoise), the land (bear) and heaven (crow). Similarly, the myth of Chumong of the Puyō and Koguryō people also features animals representing water, land and heaven. All versions have in common that animals representing the sea and the heaven have a positive influence on the story, while the animals of the land do not (Ōbayashi 1984:179).

The other important figure is that of Itsuse in the Jinmu myth. Likewise, Onjo, the first king of Paekche, is looking for a place to found a kingdom with his elder brother Pullyu. Both stories follow essentially the same structure:

Two brothers start out together to seek a locality for a new kingdom. The elder brother, who in each case represents the sea principle, dies in vain while the younger brother, who symbolizes the land, succeeds in founding the kingdom and in receiving the investiture to become its first ruler. (Ōbayashi 1984:179).

Ōbayashi also points out some similarities in the “season for the renewal of kingship,” which was the tenth and eleventh month both in Japan and in Koguryō and Paekche. Despite some evident similarities with the myths of Hyōkkōse of Silla and Suro of Kaya, he states that the “parallels among the descent myths, foundation myths, and myths of kingship renewal [suggest] that the ruling aristocratic culture of ancient Japan was akin to that of ancient Koguryō (and those of Puyō and Paekche)” (Ōbayashi 1984:180).

This “monarchial culture” may have come from the Korean peninsula to Japan in the 5<sup>th</sup> century CE. These people had integrated “Altaic pastoral culture” into their culture, which was “endowed with the cultural heritage of the pastoral culture of Iranian extraction”. Ōbayashi concludes that the “Indo-European myths were brought to Japan as part of the ruling-class culture that came into the country by way of the Korean peninsula with the Altaic pastoral culture as an intermediary” (Ōbayashi 1977:22–23). Thus, this myth is part of the northern line myths.



## 7.7. Conclusion

In this chapter I have classified Japanese myths according to the northern and southern lines myth structure outlined by Wittkamp. Researchers generally agree that the *Kojiki* and *Nihon Shoki* were designed as political instruments by Tenmu Tennō to secure rule over all the Wa lands. This makes it possible to detach the northern line myths of the ruling elite that presumably came to Japan during the 5<sup>th</sup> century CE from the potentially older southern line myths.

For the development of the Japanese language, it is important to understand who the carriers of the northern and southern line myths were and what language they can be associated with. As I have shown in previous chapters, the Japonic language was already present in the Japanese archipelago before the northern monarchial culture entered from the Korean peninsula.

This leaves the question of associating the southern line myths with a people and their language. One possible interpretation is that the southern line myths are Jōmon myths that were present in the Japanese archipelago before the Yayoi period set in. Consequently, it would be likely that Jōmon people and their language are associated with these myths and as a consequence their importance for the genesis of the Japanese language would be insignificant.

However, the southern line myths may have also come to Japan in the early phases of the Yayoi period and thus denote the first speakers of the Japonic languages in the Japanese archipelago. Further research is necessary to fully understand the importance of the southern line myths for the development of the Japanese language and its origin.

One area that may provide crucial information is the study of the Hayato people of southern Kyūshū. The accounts in the *Kojiki* clearly link these people to southern line myths and also imply their subjugation by the Yamato-based ruling elite. It seems clear that the Hayato were a people who long withstood the rising power from the Yamato regime until their final subjugation. I will discuss the Hayato people in more detail in the next chapter.

## 8. Ethnology

It is generally agreed that major immigration movements to Japan from the Korean peninsula occurred during the Yayoi and Kofun periods (Pietrusewsky 2013:171). The Japonic language family seems to have been established on the Japanese archipelago during the Yayoi period and can be attested through lexical items recorded in the 3<sup>rd</sup> century CE *SGZ*. However, there is a gap of more than one thousand years between these first recordings of the Pre-Old Japanese and the initial Yayoi immigrants that came with wet rice agriculture. The general continuity in genetical and archaeological materials suggests that the arrival of the Japonic language family also coincides with the initial Yayoi people. In this chapter I would like to discuss the primordial cultural traits and customs of the Wa people.

The *SGZ* states the Wa people tattoo their bodies and faces. Furthermore, they are accustomed to the sea and like to dive to get clams and catch fish, whereby patterns on their bodies help them against fish and other sea creatures. They plant grains, rice and flax and have mulberry trees for silkworms, but use no cattle or horses. For textiles they produce linen, silk and cotton fabrics and wear wide, unsewn cotton cloths. Each chiefdom has a market for trading goods and is controlled by a high Wa representative who collects taxes.

For special events they determine their fortune by baking bones that are examined for signs with the same words used as that of Chinese tortoise shell divination. When a person dies, they are buried in a coffin with no inner sealing box in an earth mound. After a mourning period where they do not eat meat and sing, dance and drink sake, the family of the deceased goes into to the water for purification (*SGZ* translation from Kidder 2007:12–18).

As the information stems from the 3<sup>rd</sup> century CE (late Yayoi period), it remains unclear in how far these customs resemble those of the first Yayoi immigrants. By examining the frontiers of the Wa territory, I will try to assess whether any native populations can be detected that retain more original features of early Yayoi settlers. Such indigenous people could represent an older layer of Wa people on the Japanese archipelago.

### 8.1. The Wa frontiers

The Emishi people to the east of the Wa territory have already been covered extensively in research. As they are not considered to be related to the Wa people and are an older Jōmon population that did not speak a Japonic language, I will disregard them for the search of the origins of the Japanese languages.

I will rather focus on the indigenous people of southern Kyūshū, because they have not been covered much in Western research. Three different terms are used in historical sources to refer to the people of southern Kyūshū: *Kona*, Kumaso and Hayato. All recorded instances have in common that they refer to people who were reluctant to submit to the ruling forces of central Japan. This fact as well as the geographical link to southern Kyūshū lead me to believe that all sources refer to essentially the same group of people. I will substantiate the view that *Kona*, Kumaso and Hayato refer to the same people in the following sections.

### 8.1.1. The Kona chiefdom

The *SGZ* mentions that the Wa queen was in conflict with a chiefdom called *Kona*. Contrary to the Wa chiefdoms of the 3<sup>rd</sup> century CE, it was ruled by a male king and fought against the Wa. *Kona* must have been a relatively powerful chiefdom, because Queen Himiko was seeking help from her Chinese allies in the fight against them.

倭女王卑彌呼與狗奴國男王卑彌弓呼素不和，遣倭載斯、烏越等詣郡說相攻擊狀。

“Queen of Wa Himiko had been in conflict with Himikoko, the male ruler of Kona, and had sent Kishi-uo and others of Wa to visit the commandery and to make a report on the circumstances of the attack.” (Kidder 2007:17)

Researchers generally agree that the kingdom of *Kona* refers to the Kumaso people of southern Kyūshū<sup>51</sup> (Ōta 1928, cited in Young 1958:170; Matsumoto 1971:29–32; Hattori 1987:132; Bentley 2008b:30; Araki 2013:142)<sup>52</sup>. I will provide further information on the Kumaso in section 8.1.2.

The exact location in Kyūshū is still debated and a variety of opinions exist. Mori Kōichi gives a very detailed description of the location of *Kona* along the Kuma River 球磨川 in Kuma district 球磨郡 in the south of Kumamoto prefecture. He thinks that the center of the *Kona* kingdom was in Menda-machi 免田町 and is related to Saizon tumulus 才園古墳 (Mori 2013:27–28). Another possibility is added by Kikuchi Hideo, who thinks that part of *Kona* could have been located in the lower reaches of the Kikuchi River in the Kikuchi plains (Kikuchi 2010:70–71). He bases this assumption on the name of a *Kona* ruler called *kukuchi-biko* 狗古智卑狗 in the *SGZ*, interpreting this name as *Kikuchi-biko* 菊池彦. Besides that, he notes that the *Wamyōshō* 和名抄 (completed in 938 CE)<sup>53</sup> glosses the name as ククチ, which he interprets as

<sup>51</sup> More specifically it refers to the Kuma tribe that is part of the Kumaso people (see 8.1.2.1).

<sup>52</sup> Kidder is skeptical of this, but also states that *Kona* “could well have been in southeast Kyushu, where the obstreperous people who came to be known as Kumaso/Hayato resided” (Kidder 2007:303, note 109).

<sup>53</sup> Japanese dictionary of Chinese character readings.

an older reading of the name (Kikuchi 2010:39, 44). Likewise, Kadowaki Teiji also suggests that *Kona* was in the area south of the Kikuchi River including Uto 宇土 and Amakusa 天草 – the area where the Eta Funayama tumulus 江田船山古墳 was later established (Kadowaki 2008:89–90). Other areas considered are Kagoshima and Miyazaki (Ito 2016:281) and the Kumamoto plains (Nogami 2012:246).

### 8.1.2. The Kumaso people

Now that I have shown the relationship between *Kona* and the Kumaso people, I will provide further information of this ethnic group. The area of the Kumaso is first mentioned in the creation myth of the *Kojiki* and refers to the provinces of Hyūga 日向, Ōsumi 大隅 and Satsuma 薩摩 in the southern part of the island of Tsukushi (Kyūshū) (Aston 1972:192, note 3). This is mainly part of the Kyūshū mountain region (九州山地), which is not suited for wet-rice agriculture because of white pumiceous soil called *Shirasu* シラス which is formed through volcanic activity (Kamimura 1984:2).

To date the existence of the Kumaso people, entries from the *Nihon Shoki* provide important information, with most entries appearing in book 7 (Keikō Tennō; traditionally dated to 71–130 CE). As it is widely believed that the Yamato court has systematically predated the emperor reign dates to make their lineage seem continuous and long lasting, it is necessary to correct these dates to fit the archaeological record. As Philippi pointed out, more reliable death dates of some of the Japanese emperors were recorded in the Shimpuku-ji manuscript of the *Kojiki* (Philippi 1969:18–19).

In Table 5 I have listed these death dates alongside the traditional *Nihon Shoki* dates and an adjustment chronology of reign dates based on archaeological material, which was developed by Umehara Sueji and Kobayashi Yukio<sup>54</sup>.

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<sup>54</sup> These should be considered as rough dates that have been arrived at by “sliding it up and down until they were satisfied with a fit” (Kidder in Barnes 2007:24, note e). Nevertheless, these are probably the most accurate dates available.

|        | <i>Nihon Shoki</i> | <i>Kojiki</i> | Archaeology |
|--------|--------------------|---------------|-------------|
| Sujin  | 97–30 BCE          | 258 CE        | 219–249 CE  |
| Suinin | 29 BCE–70 CE       | –             | 249–280 CE  |
| Keikō  | 71–130 CE          | –             | 280–316 CE  |
| Seimu  | 131–190 CE         | 355 CE        | 316–343 CE  |
| Chūai  | 191–200 CE         | 362 CE        | 343–346 CE  |

Table 5: Reign dates of selected emperors from the *Nihon Shoki*, death dates from the *Kojiki* and adjusted reign dates through archaeology

The adjusted reign dates posit that Keikō Tennō reigned between 280–316 CE (Barnes 2007:22). Another method of correcting reign dates is by adding multiples of sixty to the dates to the traditional dates. Three cycles would fit into the frame provided by the *Kojiki* dates and result in a reign date of 251–310 CE.

It will not be possible to give definite reign dates for Keikō Tennō, but from the dates provided above, I surmise that the stories from volume 7 of the *Nihon Shoki* should be considered to be of the late 3<sup>rd</sup> and early 4<sup>th</sup> centuries. In the next paragraphs I will provide information on the Kumaso and their interactions with the Yamato people.

In the twelfth year of Keikō Tennō's reign, the Kumaso rebelled and Keikō Tennō made his way to Tsukushi (Kyūshū). The two Kumaso chiefs Atsukaya and Sakaya had a following too large to subdue. However, one of the Kumaso chiefs had two beautiful daughters Ichi-fukaya and Ichi-kaya. A plan was made during a council meeting and Keikō offered presents to the two young women to gain their affection and obtain information on the Kumaso chiefs. The daughters were deceived and Keikō had intercourse with Ichi-fukaya, who then agreed to help him. After she had made her father drunk and he fell asleep, she cut his bowstring and two soldiers came to kill the Kumaso brave. The emperor was provoked by her disrespectful behavior and killed Ichi-fukaya. He gave her sister Ichi-kaya to the Miyakko of the Land of Ki. The Kumaso were subdued and Keikō lived in the palace of Takaya for the next six years (Aston 1972:192–196).

In the 27<sup>th</sup> year of his reign, the Kumaso rebelled again and Yamato Woguna was sent to subdue them. The Kumaso leader Torishi-kaya, the Brave of Kahakami hosted a banquet, which Yamato Woguna secretly attended with a sword underneath his dress by disguised himself as a young girl. Torishi-kaya spent the evening with this beautiful *girl* and became drunk. Yamato Woguna then drew his sword and stabbed Torishi-kaya in the chest. Before he died, Torishi-kaya bestowed the title of Yamato Takeru upon Yamato Woguna (Aston 1972:200–201).

It is believed that this story is set in a place called *kumaso no ana* 熊襲の穴 around Kirishima in southern Kyūshū. *Kumaso no ana* consists of two caves with an area of approximately 200 m<sup>2</sup> and 500 m<sup>2</sup> according to the signboard placed in front of it (see Figure 15).

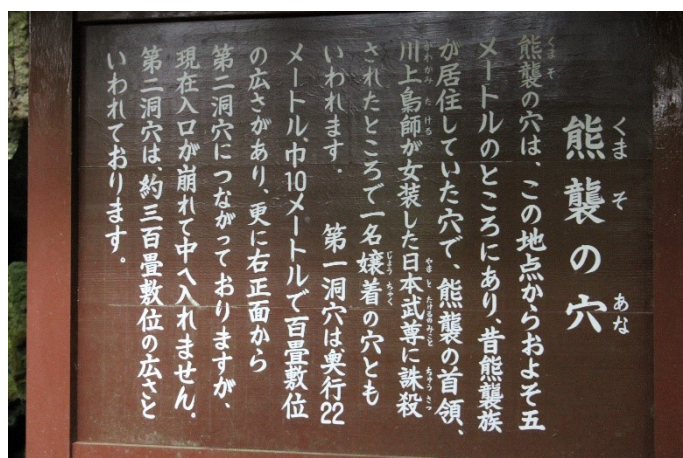


Figure 15: *Kumaso no ana* signboard

The original Kumaso territory can be reconstructed by researching the locating burial sites specific to them (Kamimura 1984:17, Nagayama 2009:9, 12–15; Nakamura 1996:114; Ōbayashi 1975:122–123). This has shown that the area of the Kumaso people was divided into the regions of two tribal units based on differing burial practices. It is generally believed that the word Kumaso is made up of the names of those two tribes – the Kuma tribe to the west and the So tribe to the east. I will now briefly describe the information available about these two tribes.

#### 8.1.2.1. The Kuma tribe

The name of the Kuma tribe is usually considered to be related to the Kuma district 球磨郡 in the southeast of Kumamoto prefecture (Kamimura 1984:15). Their area was to the southwest coast of Kyūshū around the Yatsushiro sea and Amakusa islands and extended inland to the Hito-yoshi and Ebino Basins. It is characterized by graves of the *chikashiki-itaishidzumi-sekishitsubo*-type (地下式板石積石室墓 Underground flagstone rock chamber grave), which are distributed mainly along the coastlines and the rivers (see Figure 16).

For the burial, a hole is dug by setting stone slabs or stone plates in a one to two meter deep pit from the ground. Then, the dead body and burial goods are then placed in the rock chamber and covered with dozens of stone slabs. It has been speculated that this burial practice spread south from the Gotō Islands in the northwest of Kyūshū during the Yayoi period and originated from the *Sekkanbo*-type burials 石棺墓 (Nagayama 2009:14-15).

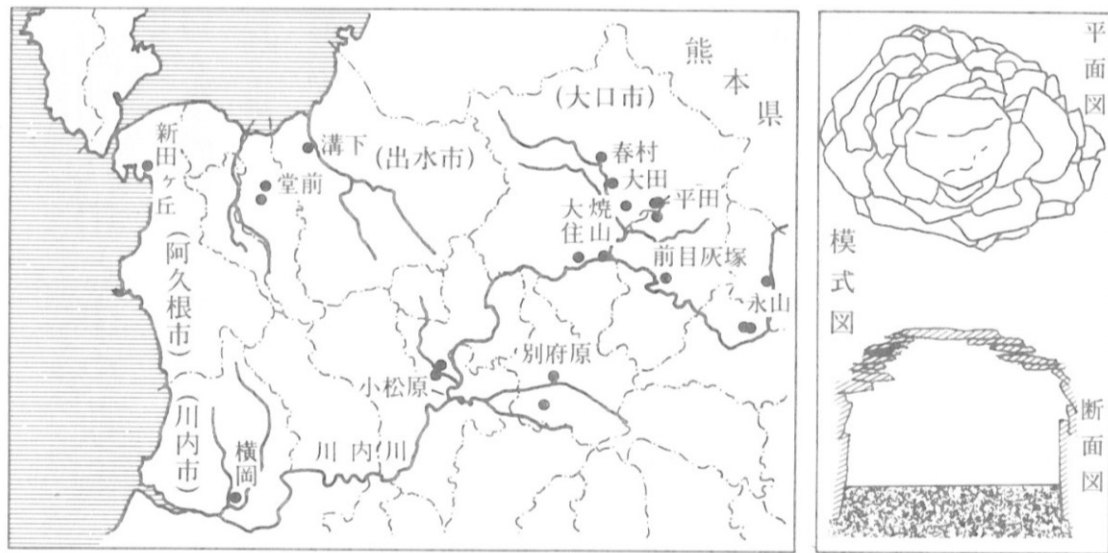


Figure 16: Graves of the Kuma tribe (Nakamura 1996:115)

#### 8.1.2.2. The So tribe

The So tribe is associated with the Soo district 曾於郡 in the Shibushi bay area southeast of Kagoshima prefecture (Kamimura 1984:15; Matsumoto 1971:46). They settled the southeast of Kyūshū in the Shibushi Bay around Miyazaki and inland the Ebino Basin. Their graves were of the *Chikashiki-yokoanabo*-type (地下式横穴古墳 Underground Yokoana-Kofun) as shown in Figure 17.

In it, the dead bodies were buried alongside grave goods in a stone chamber that had an entrance to the side which was closed with big stones. One theory suggests that this burial style came from the Korean peninsula and is related to the *Yokoanashiki-sekishitsu* burials of Paekche origin (百濟系横穴式石室墳). Other theories see an influence of the Yamato-based Takatsuka-kofun 高塚古墳 on burial practices of the southern Kyūshū area. Iron armory started appearing in the graves of the So tribes from the 5<sup>th</sup> century (Nagayama 2009:12-14).

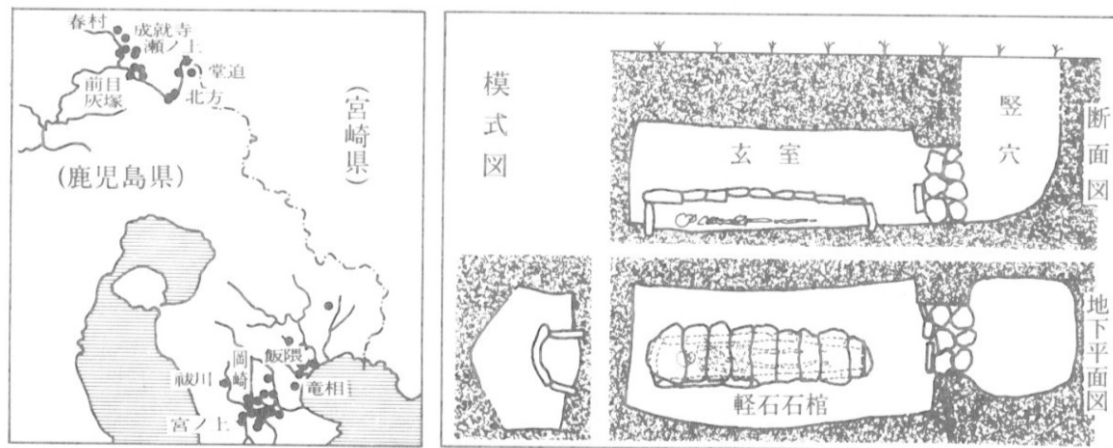


Figure 17: Graves of the So tribe (Nakamura 1996:115)

During the Kofun period, forces from the Yamato area started conquering the area of the Kumaso people and *takatsuka-kofun* 高塚古墳 graves started appearing. These are the main three burial styles that can be found in southern Kyūshū during the Kofun period (see Figure 18). Other minor styles present in the area, for example at the southern tip of Kyūshū will not be covered in this chapter.

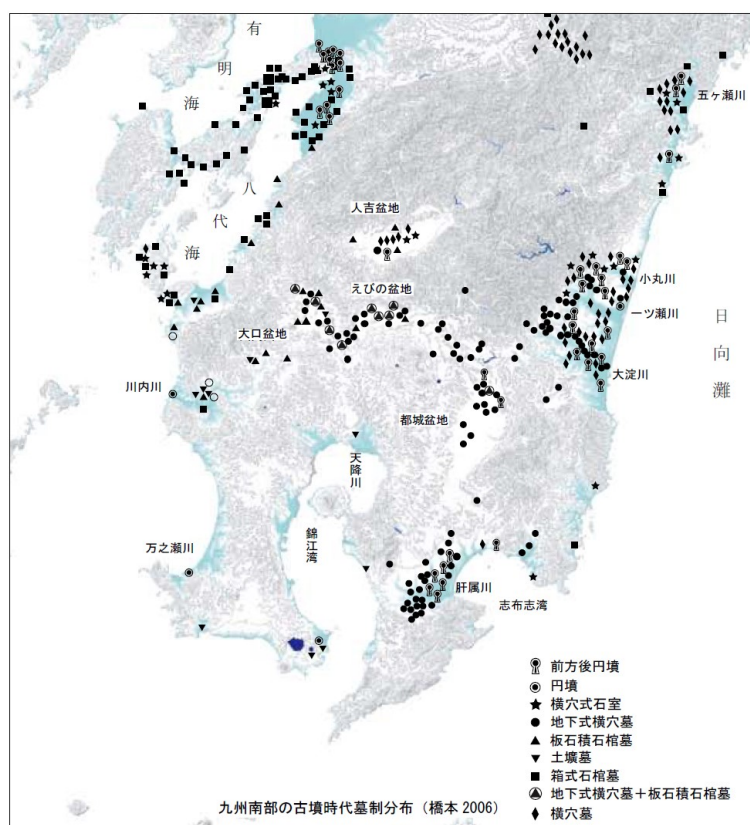


Figure 18: Burial sites during the Kofun period (Hashimoto 2009:6)

### 8.1.3. The Hayato people

I will now turn to the Hayato people and their connection to the Kumaso. The accounts recorded in the *Kojiki* and *Nihon Shoki* provide information on the interactions between the Yamato court and the Kumaso people, who did not obey the Yamato court, until the early 5<sup>th</sup> century CE. After the Yamato court extended their power and subjugated them, they were renamed and referred to as Hayato from the end of the 5<sup>th</sup> century CE (Ōbayashi 1975:66; Kamimura 1984:14). According to archaeological records, there was no big change in southern areas other than the fact the *kinai-kei takatsuka-kofun* 畿内刑高塚古墳文化 from Yamato spread there (Kamimura 1984:14), which also attests that the Kumaso and Hayato were the same people.



It is also known that after being conquered, Hayato were employed in service to the Yamato court and reported to the emperor. They were also known for their art performance and entertainment with singing and dancing with a voice that sounded like barking (Hirama 2010:75)<sup>55</sup>. The first mention of Hayato people in service of the Yamato court can be found during the reign of Richū Tennō (trad. 400–405; adjusted to 427–432). The story is mentioned both in the *Kojiki* (*KJK* 3) and the *Nihon Shoki* (*NSK* 12).

Prince Mizuha-wake (later Hanzei Tennō), the third son of Nintoku Tennō, plotted a plan against his older brother Prince Nakatsu. He promised a close servant of Nakatsu, the Hayato man named Sashihire (Sobokari in the *KJK* version) to elevate him to the rank of *Ōmi* 大臣 if he assassinated Nakatsu. Sashihire agreed and entered Mizuha's service. He was rewarded by the prince with his coat and trousers of brocade and concealed himself. After prince Nakatsu went to the toilet, Sashihire killed him with a spear. Upon hearing this, Mizuha contemplated:

Although [Sashihire] has performed services of great merit on my behalf, he has killed his own master—an unrighteous act. If I fail to reward his meritorious service, my failure will be counted as a breach of faith. If I carry out my obligation to him, then I must fear his mentality. Thus, while rewarding him for his merits, I will destroy his mortal body. (Philippi 1969:328)

He bestowed upon Sashihire the title of *Ōmi* and held a celebration where various officials gave obeisance to the Hayato man. Mizuha presented Sashihire with a large cup of wine and killed him by stabbing him in the neck with his sword (translations of *NSK* 12 from Aston 1972:304–305; *KJK* 3 from Philippi 1969:327–329).

I believe that the information provided about *Kona*, Kumaso and Hayato shows that there were a people living in the southern Kyūshū area who were opposing Yamato rule until the Kofun period. In addition to the mythological accounts of the Hayato people provided in chapter 7, this provides further material that helps understand who those people were.

#### 8.1.4. The immigration of the Kumaso and Hayato people

In the next sections I will determine where and when the Kumaso/Hayato people came to Japan. On the one hand, they could have been Jōmon people indigenous to the area, who were pushed down south by the advancing Yayoi people and eventually subdued by the Yamato court. On the other hand, it is also possible that they were immigrants who came during the early phases of the Yayoi period. In this case, they may be considered to have spoken a form of Japonic which could also be related to the languages of the Ryūkyū islands.

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<sup>55</sup> Examples of this are contained in the *Engishiki* 延喜式 (vol. 7) and *Shoku Nihongi* 続日本紀 (vol. 5).

The Kumaso people have in the distant past been considered to be either as tribe related to the Japanese people, descendants of the Wa people or that they are a tribe that came to Japan from the south (Oka 1933:100). Matsumoto Tomaru finds it likely that the Kumaso people settled southern Kyūshū from the Ryūkyū islands and migrated by island-hopping using seasonal winds and the Kuroshio Current (Matsumoto 1971:34). Such theories connecting the Kumaso to immigration movements from the south have been brought forward since the pre-war period (Matsumoto 1944:4), but a lack of evidence has hampered attempts to prove such assumptions. Based on archaeological and anthropological data, Kamimura speculates that the people of southern Kyūshū should be considered indigenous people of the region that were present since the Jōmon period (Kamimura 1984:3).

The *Kojiki* and *Nihon Shoki* myth of the fish hook of Hoderi, the ancestor of the Hayato people can be seen as a hint that there is a connection between the Hayato and southern cultures such as Taiwan, the Philippines and Oceania. However, as Hudson points out, “no fishhooks are known from the Neolithic of the southern Ryukyus” (Hudson 2017:195). This seems to suggest that the route this myth took may not have been through the Ryūkyū islands.

The most promising material for substantiating the ancestry of the Kumaso and Hayato people is supplied by DNA data. Mitochondrial DNA of skeletons associated with the Hayato people have been analyzed by Saiki Kazunobu and Wakebe Tetsuaki (Saiki and Wakebe 2012:105). The specimens have been unearthed from six burial sites of the *yokoana*-type found in the mountain area of south Kyūshū around Ebino City えびの市, Miyazaki Prefecture (Saiki and Wakebe 2012:106, 112). After analyzing thirty samples, they concluded that the Hayato people share almost no characteristics with Jōmon populations. They seem to be closer to people from the continent (*torai-kei-no-bito* 渡来系の人), but the data was not good enough to make any definite assertions (Saiki and Wakebe 2012:122–123). It remains to be seen if future research can manifest such a proposition.

#### **8.1.5. Language of the Kumaso and Hayato people**

Due to the scarcity of data on the Hayato language, efforts to find connections to other languages remain speculative (Akita 1993). For this reason, assumptions on the Hayato language have been based on other factors such as geographical proximity, which led to a proposed connection to the Ryūkyūan languages of southern Japan. One such theory by Uemura Yukio states that the Ryūkyūan languages are a dialect of the Hayato language. This hypothesis was initially supported by Leon Serafim, but he later changed his view based on the relatively late date that was proposed for the southward move of the Ryūkyūan languages (Serafim 2003:472–474).

Language data for the Hayato language are scarce and only two words have been recorded in the *Ōsumi Fudoki*. These are *bishi* 必志 ‘sand in the ocean’ and *kushira* 髮梳 ‘hair comb’ (Akimoto 1971:526). Additionally, Kumaso names are usually followed by the suffix *-kaya* (鹿文 in *NSK* 7). It is unclear what this suffix means, but one possible etymology could possibly come from the Japonic toponym data covered in section 5.1. Beckwith records the item AKog<sup>56</sup> \*kar 加 ‘tribal chief’ > OKog<sup>57</sup> \*key (or \*kay) 皆 ‘king’ for the language of the Koguryō kingdom. Unfortunately, there is not enough information available to verify this etymology and it can therefore only be seen as mere speculation.

Additional information on the language of southern Kyūshū is provided by the accounts of the *Kona* chiefdom. The second syllable of *kona* (\*ko-nɔ 狗奴), the name of their kingdom, shows some resemblance to the Wa chiefdom called Na (\*nɔ 奴) that received the Gold Seal. The name of their official may be interpreted as the chieftain (*hiko*) of Kikuchi (\*ko-kɔ-ʈe-pie-ko 狗古智卑狗). Their king title (\*pie-mie-kun-hɔ 卑彌弓呼) is also very similar to that of the Wa queen (\*pie-mie-hɔ 卑彌呼). This would suggest that the people of the *Kona* kingdom also spoke a language similar to that of the Wa. However, it is not clear where the Chinese scribes got their information from. It is possible that they never interacted with the *Kona* people and received all the information through the Wa people ruled by Queen Himiko. Even though one could argue that these lexical items may be related to Japanese, it is not enough data to provide any reliable interpretations.

## 8.2. Conclusion

Information about the indigenous people of southern Kyūshū is scarce. Because of this, the exact nature of these tribes of southern Kyūshū has not been fully understood yet. Old Japanese myths that feature the Kumaso and Hayato people also suggest a connection to southern area such as Indonesia and Oceania. They are portrayed as a sea people and most archaeological excavations of their settlements revealed a close proximity to the sea of major rivers.

However, these results still need to be verified by further research and only outline a preliminary interpretation of the available materials. Through further DNA testing and excavations in southern Kyūshū, this view can be enhanced to provide a more detailed picture of the tribes of southern Kyūshū.

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<sup>56</sup> Archaic Koguryō from the 3<sup>rd</sup> century CE.

<sup>57</sup> Old Koguryō from around the 8<sup>th</sup> century CE.

Based on the data provided above, it seems more likely to me that the Kumaso/Hayato came to southern Kyūshū from the Korean peninsula during the early Yayoi period and spoke a Japonic language. At this moment, this assertion is still very speculative and needs to be dealt with in future research. I believe that ultimately, research on the Kumaso and Hayato people may be able to provide important information to better understand the early phases of the Yayoi period and the development of the Japanese language and hence advance research on the origins of the Japanese languages.

## 9. Conclusion

In this thesis I have dealt with the question of the origins of the Japanese languages and looked at available data from a variety of fields. While it is not possible to give a definite answer to this question, I will outline some preliminary assumptions as to how the Japonic language could have developed over time.

My research has shown that among the two genetically defined groups of Yayoi and Jōmon as outlined by the ‘dual structure hypothesis,’ the Japonic language corresponds with the Yayoi people that came to Japan in the beginning of the first millennium BCE. Although these immigrants mixed with the native Jōmon populations, it is not expected that the Jōmon languages had a great impact on Japonic. This is suggested by the Japonic toponyms from the Korean peninsula that demonstrate that Japonic was spoken on the Korean peninsula – an area where no Jōmon DNA is found.

It is also congruent with the ‘farming/language dispersal hypothesis,’ which suggests that the language of the technologically advanced people prevails. In the case of Japonic, this refers to the Yayoi immigrants and their wet-rice agriculture. The subsistence system, which incorporates wet-rice agriculture and millet cultivation, also indicates that speakers of Japonic were in contact with Koreanic speakers.

Millet agriculture likely came from northern areas and mixed with wet-rice agriculture of southern origin – either on the Korean peninsula or in its vicinity. The fact that rice-related vocabulary in Japanese is closely related to Austronesian, while Koreanic vocabulary is not, can be interpreted to mean that they are two different languages and that Japonic came from the south with a subsistence system based on rice. Additionally, it was also shown that the rice plants common in Japan stem from an area south of the Yangtze River. Archaeological data also demonstrates that Austronesians did not enter the Japanese islands through the Ryūkyū island chain, although an Austronesian presence was detected for the southernmost islands. A continental route for a spread of rice agriculture therefore seems natural.

Historical and mythological sources show a dual structure with a northern line that is usually associated with a monarchical culture of ancient Korean kingdoms which came to Japan from the 4<sup>th</sup> or 5<sup>th</sup> century CE. Some older myths of the southern line associate the Hayato people of southern Kyūshū with the sea. These myths often originate in southern China and I believe that they – along with the Hayato people – should not be considered to be from the Jōmon period, but rather from the early Yayoi period. Old Chinese accounts from the *SGZ* resemble the southern line myths in that they connect the late Yayoi people with the sea and an entry from the *JNS*

even directly links them to native populations of the area around the lower Yangtze River Valley in southeastern China.

I therefore surmise that the homeland of the Pre-Japonic speakers was in the lower Yangtze River Valley, an area possibly also inhabited by Pre-Austronesians. From there, these highly-skilled sea-faring people moved up with their rice agriculture to the Korean peninsula in the second millennium BCE – possibly, but not necessarily via the Shandong and Liaodong peninsulas – where they acquired the knowledge of millet cultivation by coexisting in an area with Koreanic speakers over an extended period of time. Thereafter, they moved to northern Kyūshū and spread Japonic to the Japanese archipelago, first to the east and eventually also to the south into the Ryūkyū islands.

## Bibliography

- Adachi, Noboru, Ken'ichi Shinoda and Hirofumi Matsumura  
 2009 "Mitochondrial DNA Analysis of Jomon Skeletons from the Funadomari Site, Hokkaido, and its Implication for the Origins of Native American," *American Journal of Physical Anthropology* 138/3: 255–265.
- Adachi, Noboru, Junmei Sawada, Minoru Yoneda, Koichi Kobayashi and Shigeru Itō  
 2013 "Mitochondrial DNA Analysis of the Human Skeleton of the Initial Jomon Phase Excavated at the Yugura Cave Site, Nagano, Japan," *Anthropological Science* 121/2: 137–143.
- Adachi, Noboru, Ken'ichi Shinoda and Masami Izuho  
 2014 "Further Analyses of Hokkaido Jomon Mitochondrial DNA." Yōsuke Kaifu, Masami Izuho, Ted Goebel, Hiroyuki Sato and Akira Ono (eds): *Emergence and Diversity of Modern Human Behavior in Paleolithic Asia*. College Station: Texas A&M University Press, 406–417.
- Akima, Toshio  
 1993 "The Myth of the Goddess of the Undersea World and the Tale of Empress Jingū's Subjugation of Silla," *Japanese Journal of Religious Studies* 20/2–3: 95–185.
- Akimoto, Kichirō 秋本 吉郎  
 1971 *Fudoki* 風土記. Nihon koten bungaku taikai 日本古典文学大系 2. Tokyo: Iwanami Shōten. [1958].
- Akita, Yoshiaki 秋田 義昭  
 1993 "Hayato-Zoku No Kotoba No Keifu 隼人族の言葉の系譜 [Genealogy of the Hayato Language]," *Fukuoka Women's University* 38: 1–16.
- Allan, Sarah  
 1984 "The Myth of the Xia Dynasty," *Journal of the Royal Asiatic Society of Great Britain and Ireland* 2: 242–256.
- Antoni, Klaus  
 1982 *Der weisse Hase von Inaba: Vom Mythos zum Märchen*. Münchner ostasiatische Studien. Wiesbaden: Franz Steiner Verlag.  
 2015 "On the Religious Meaning of a Japanese Myth: The White Hare of Inaba," *Comparative Mythology* 1/1: 61–72.
- Araki, Nobumichi 荒木 信道  
 2013 *Himiko No Ryōbo Etafunayamakofun No Shinjitsu* 卑弥呼の陵墓江田船山古墳の真実 [The Tomb of Himiko: The Truth about the Eta Funayama Tumulus]. Tokyo: Gentosha Renaissance 幻冬舎ルネッサンス.
- Aston, William George  
 1972 *Nibongi: Chronicles of Japan from the Earliest Times to A.D. 697*. Tokyo: Tuttle Publishing [1896].
- Barnes, Gina L.  
 2001 *State Formation in Korea: Historical and Archaeological Perspectives*. Richmond: Curzon.  
 2007 *State Formation in Japan: Emergence of a 4th-Century Ruling Elite*. London: Routledge.  
 2015 *Archaeology of East Asia: The Rise of Civilization in China, Korea and Japan*. Oxford: Oxbow Books.
- Beckwith, Christopher I.  
 2004 *Koguryo, the Language of Japan's Continental Relatives: An Introduction to the Historical Comparative Study of the Japanese Koguryoic Languages with a Preliminary Description of Archaic Northeastern Middle Chinese*. Leiden: Brill.  
 2010 "Could there be a Korean-Japanese Linguistic Relationship Theory? Science, the Data, and the Alternatives," *International Journal of Asian Studies* 7/2: 201–219.
- Bellwood, Peter  
 2005 "Examining the Farming/Language Dispersal Hypothesis in the East Asian Context." Laurent Sagart, Roger Blench and Alicia Sanchez-Mazas (eds): *The Peopling of East Asia*. London and New York: RoutledgeCurzon, 17–30.

- 2006 "Austronesian Prehistory in Southeast Asia: Homeland, Expansion and Transformation." In Bellwood, Peter, James J. Fox and Darrell Tryon (eds): *The Austronesians: Historical and Comparative Perspectives*. Canberra: ANU E Press, 103–118.
- Bellwood, Peter and Colin Renfrew (eds)  
2002 *Examining the Farming/Language Dispersal Hypothesis*. Cambridge: McDonald Institute for Archaeological Research.
- Benedict, Paul K.  
1990 *Japanese / Austro-Tai*. Ann Arbor: Karoma Publ.
- Bentley, John R.  
2000 "A New Look at Paekche and Korean: Data from Nihon Shoki," *Language Research* 36/2: 417–443.  
2008a *A Linguistic History of the Forgotten Islands: A Reconstruction of the Proto-Language of the Southern Ryūkyūs*. Leiden: Brill.  
2008b "The Search for the Language of Yamatai," *Japanese Language and Literature* 42/1: 1–43.  
2011 "Triangulating the Early Language History of Japan (review)," *The Journal of Japanese Studies* 37/1: 154–161.
- Best, Jonathan W.  
2006 *A History of the Early Korean Kingdom of Paekche: Together with an Annotated Translation of the Paekche Annals of the Samguk Sagi*. Cambridge: Harvard UnivPress.
- Blench, Roger  
2013 "The Prehistory of the Daic- or Kra-Dai-Speaking Peoples and the Hypothesis of an Austronesian Connection." Marijke J. Klokke and Véronique Degroot (eds): *Unearthing Southeast Asia's Past: Selected Papers from the 12th International Conference of the European Association of Southeast Asian Archaeologists*. Volume 1. Singapore: NUS Press, 3–15.
- Blust, Robert  
1996 "Austronesian Culture History: The Window of Language," *Transactions of the American Philosophical Society* 86/5: 28–35.  
2013 *The Austronesian Languages*. Canberra: Asia-Pacific Linguistics.  
2014 "Some Recent Proposals Concerning the Classification of the Austronesian Languages," *Oceanic Linguistics* 53/2: 300–391.
- Byington, Mark E.  
2009 "The Account of the Han in the Sanguozhi: An Annotated Translation." Mark E. Byington (ed.): *Early Korea: The Samhan Period in Korean History*. Volume 2. Seoul: Korea Institute, Harvard University, 125–152.
- Caspermeyer, Joseph  
2015 "New Genetic Evidence Resolves Origins of Modern Japanese," *Molecular Biology and Evolution* 32/7: 1913.
- Chadwick, Nora K.  
1930 "Notes on Polynesian Mythology," *The Journal of the Royal Anthropological Institute of Great Britain and Ireland* 60: 425–446.
- Cheng, Hsiao-Chieh, Hui-Chen Pai Cheng and Kenneth Lawrence Thern (trs)  
1985 *Shan Hai Ching: Legendary Geography and Wonders of Ancient China*. Taipei: National Institute for Compilation.
- Comrie, Bernard  
1993 "Altajskaja Problema i Proisxoždenie Japonskogo Jazyka jazyka. [The Altaic problem and the origin of the Japanese language] (review)," *Language* 69/4: 828–832.
- Crowley, Terry and Claire Bower  
2010 *An Introduction to Historical Linguistics*. Fourth Edition. Oxford: Oxford University Press.
- De Bary, William Theodore, Donald Keene, George Tanabe and Paul Varley  
2001 *Sources of Japanese Tradition*. 1. *From Earliest Times to 1600*. 2. ed. New York: Columbia University Press.



- Doerfer, Gerhard  
1974 "Ist das Japanische mit den altaischen Sprachen verwandt?" *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 124: 103–142.
- Florenz, Karl  
1919 *Die historischen Quellen der Shinto-Religion*. Göttingen: Vandenhoeck und Ruprecht.
- Fogel, Joshua A.  
2012 "The Gold Seal of 57 CE and the Afterlife of an Inanimate Object," *Journal of the History of Ideas* 73/3: 351–369.
- Forke, Alfred  
1907 *Lun-Hêng*. Part I: *Philosophical Essays of Wang Ch'ung*. Leipzig: Harrassowitz.  
1962 *Lun-Hêng*. Part II: *Miscellaneous Essays of Wang Ch'ung*. New York: Paragon Book Gallery [<sup>1</sup>1911].
- Forster, Peter and Colin Renfrew  
2011 "Mother Tongue and Y Chromosomes," *Science* 333/6048: 1390–1391.
- Frellesvig, Bjarke and John Whitman  
2008 *Proto-Japanese: Issues and Prospects*. Amsterdam: John Benjamins Publishing.
- Friday, Karl F.  
1997 "Pushing beyond the Pale: The Yamato Conquest of the Emishi and Northern Japan," *Journal of Japanese Studies* 23/1: 1–24.
- Fujio, Shin'ichirō 藤尾 慎一郎  
2014 "Nishinihon No Yayoi Inasaku Kaishi Nendai 西日本の弥生稲作開始年代 [When did the Wet Rice Cultivation with the Irrigation System begin in the Western Japan]," *Bulletin of the National Museum of Japanese History* 183: 113–143.
- Georg, Stefan, Peter A. Michalove, Alexis Manaster Ramer and Paul J. Sidwell  
1999 "Telling General Linguists about Altaic," *Journal of Linguistics* 35/1: 65–98.
- Ha, Tae-Hung and Grafton K. Mintz  
1972 *Samguk Yusa: Legends and History of the Three Kingdoms of Ancient Korea* (translated from Ilyōn). Seoul: Yonsei UnivPress.
- Hammer, Michael F., Tatiana M. Karafet, Hwayong Park, Keiichi Omoto, Shinji Harihara, Mark Stoneking and Satoshi Horai  
2006 "Dual Origins of the Japanese: Common Ground for Hunter-Gatherer and Farmer Y Chromosomes," *Journal of Human Genetics* 51/1: 47–58.
- Hanihara, Kazurō  
1991 "Dual Structure Model for the Population History of the Japanese," *Japan Review* 2: 1–33.
- Hargett, James M.  
2013 "會稽: Guaiji? Guiji? Huiji? Kuaiji? Some Remarks on an Ancient Chinese Place-Name," *Sino-Platonic Papers* 234: 1–32.
- Hashimoto, Tatsuya 橋本 達也  
2009 "Kofun Kenkyū to Kumaso/Hayato 古墳研究と熊襲・隼人 [The Study of Burial Mounds and Kumaso/Hayato]." *Symposium "Telling about the Kumaso/Hayato Era."* Kagoshima: Reimeikan, 1–6.
- Hattori, Shirō 服部 四郎  
1987 "Yamatai-koku wa doko ka 邪馬台国はどこか [Where Was the Capital of Yamatai Queendom?]," *Transactions of the Japan Academy* 42/2: 93–137.
- Hirama, Michiko  
2010 "Hayato to Kuzu no geinō sōjō: ba no ronri kara sōgaku no myakuraku o yomu 隼人と国栖の芸能奏上: 場の論理から奏楽の脈絡を読む [Music and Dance Performances of Hayato and Kuzu: Reading the Context of Musical Performances through the Logic of Their Occasion]," *Tobo Gakuen School of Music Faculty Bulletin* 36: 75–88.

- Hokkaidō Daigaku Ainu Senjūmin Kenkyū Sentā 北海道大学アイヌ・先住民研究センター  
 2010 *Ainu Kenkyū No Genzai to Mirai* アイヌ研究の現在と未来 [The Present and Future of Ainu Studies. Hokudai Ainu, Senjūmin Kenkyū Sentā Sōsho 1. Sapporo: Hokkaidō Daigaku Shuppankai.
- Hong, Wontack  
 1994 *Paekche of Korea and the Origin of Yamato Japan*. Seoul: Kudara Internat.
- 2005 “Yayoi Wave, Kofun Wave, and Timing: The Formation of the Japanese People and Japanese Language,” *Korean Studies* 29/1: 1–29.
- Horridge, Adrian  
 2006 “The Austronesian Conquest of the Sea – Upwind.” Peter Bellwood, James J. Fox and Darrell Tryon (eds): *The Austronesians: Historical and Comparative Perspectives*. Canberra: ANU E Press, 143–160.
- Hudson, Mark J.  
 1999 *Ruins of Identity: Ethnogenesis in the Japanese Islands*. Honolulu: University of Hawai’i Press.
- 2012 “‘Austronesian’ and ‘Jōmon’ Identities in the Neolithic of the Ryukyu Islands,” *Documenta Praehistorica* 39/1: 257–262.
- 2017 “The Ryukyu Islands and the Northern Frontier of Prehistoric Austronesian Settlement.” Philip J. Piper, Hirofumi Matsumura and David Bulbeck (eds): *New Perspectives in Southeast Asian and Pacific Prehistory*. Terra Australis 45. Canberra: ANU E Press, 189–199.
- Iizuka, Masaru and Takahiro Nakahashi  
 2002 “A Population Genetic Study on the Transition from Jomon People to Yayoi People,” *Genes & Genetic Systems* 77/5: 287–300.
- Itabashi, Yoshizō 板橋 義三  
 1999 “‘Konseigengo to nihongo no keisei katei’ 『混成言語と日本語の形成過程』 [Mixed Languages and the Formation of Proto-Japanese],” *Bulletin of the Graduate School of Social and Cultural Studies, Kyushu University* 5: 41–55.
- 2003 “Austronesian-Altaic Language Mixing in Old Japanese: The Core Basic Vocabulary and Affixes,” *Eurasian Studies Yearbook* 75: 5–58.
- 2015 “Nihongo no genryū to keisei 日本語の源流と形成 [The Origins and Formation of the Japanese Language],” *Japanese Journal of Physiological Anthropology* 20/1: 45–53.
- Ito, Masafumi 伊藤 雅文  
 2016 *Yamataikoku wa Kumamoto ni atta! 邪馬台国は熊本にあった!* [Yamatai Chiefdom Was in Kumamoto!]. Tokyo: Fusōsha.
- Janhunen, Juha  
 1992 “Das Japanische in Vergleichender Sicht,” *Journal de La Société Finno-Ougrienne* 84, 145–161.
- 1994 “Additional Notes on Japanese and Altaic,” *Journal de La Société Finno-Ougrienne* 85, 236–240, 256–260.
- 1998 “Ethnicity and Language in Prehistoric Northeast Asia.” Roger Blench and Matthew Spriggs (eds): *Archaeology and Language II: Correlating Archaeological and Linguistic Hypotheses*. One World Archaeology 29. London and New York: Routledge, 195–208.
- 2003 “A Framework for the Study of the Japanese Language Origins.” Alexander Vovin and Toshiki Osada (eds): *Perspectives on the Origins of the Japanese Language*. Nichibunken Japanese Studies Series 31. Kyoto: International Research Center for Japanese Studies, 477–490.
- 2005 “The Lost Languages of Koguryō,” *Journal of Inner and East Asian Studies* 2/2: 66–86.
- Jinam, Timothy A., Kanzawa-Kiriyama Hideaki and Saitō Naruya  
 2015 “Human Genetic Diversity in the Japanese Archipelago: Dual Structure and Beyond,” *Genes & Genetic Systems* 90/3: 147–152.
- Kadowaki, Teiji 門脇 禎二  
 2008 *Yamataikoku to Chiiki Ōkoku 邪馬台国と地域王国* [Yamatai-Koku and Regional Kingdoms]. Tokyo: Yoshikawa Kōbunkan 吉川弘文館.

- Kamimura, Toshi 上村 俊雄  
1984 *Hayato no Kōkogaku* 隼人の考古学 [Archaeology of the Hayato]. Archaeology Library 考古学ライブラリー 30. Tokyo: New Science Co. ニュー・サイエンス社.
- Kanzawa-Kiriyama, Hideaki, Saso Aiko, Suwa Gen and Saitō Naruya  
2013 “Ancient Mitochondrial DNA Sequences of Jomon Teeth Samples from Sanganji, Tohoku District, Japan,” *Anthropological Science* 121/2: 89–103.
- Karafet, Tatiana M., Ludmila P. Osipova, Marina A. Gubina, Olga L. Posukh, Stephen L. Zegura and Michael F. Hammer  
2002 “High Levels of Y-Chromosome Differentiation among Native Siberian Populations and the Genetic Signature of a Boreal Hunter-Gatherer Way of Life,” *Human Biology* 74/6: 761–789.
- Kawamoto, Takao 川本 崇雄  
1977 “Toward a Comparative Japanese-Austronesian I,” *Bulletin Nara University Education* 26/1: 23–49.
- Kawashima, Takamune  
2016 “Food Processing and Consumption in the Jōmon,” *Quaternary International* 404: 16–24.
- Kidder, J. Edward  
2007 *Himiko and Japan’s Elusive Chiefdom of Yamatai: Archaeology, History, and Mythology*. Honolulu: University of Hawai’i Press.
- Kikuchi, Hideo 菊池 秀夫  
2010 *Yamataikoku to Kunakoku to Tetsu* 邪馬台国と狗奴国と鉄 [Yamatai-Koku and Kuna-Koku and Iron]. Tokyo: Sairyūsha 彩流社.
- Kikusawa, Ritsuko  
2015 “The Austronesian Language Family.” Claire Bowern and Bethwyn Evans (eds): *The Routledge Handbook of Historical Linguistics*. London: Routledge, 657–674.
- Kim, Chang-Seok  
2014 “Ancient Korean Mokkan (Wooden Slips): With a Special Focus on Their Features and Uses,” *Acta Koreana* 17/1: 193–222.
- Kim, Soon-Hee, Ki-Cheol Kim, Dong-Jik Shin, Han-Jun Jin, Kyoung-Don Kwak, Myun-Soo Han, Joon-Myong Song, Won Kim and Wook Kim  
2011 “High Frequencies of Y-Chromosome Haplogroup O2b-SRY465 Lineages in Korea: A Genetic Perspective on the Peopling of Korea,” *Investigative Genetics* 2/10: 1–11.
- Kim, Taesik  
2005 “The Cultural Characteristics of Korea’s Ancient Kaya Kingdom,” *International Journal of Korean History* 8: 169–221.
- Kojima, Kyōko 児島 恭子  
2009 *Emishi/Ezo kara Ainu e* エミシ・エゾからアイヌへ [From Emishi/Ezo to Ainu]. Rekishi Bunka Raiburari 歴史文化ライブラリー 273. Tokyo: Yoshikawa Kōbunkan.
- Kosut, Mary  
2015 “Tattoos and Body Modification.” James D. Wright (ed): *International Encyclopedia of the Social & Behavioral Sciences*. 2. edition. Amsterdam: Elsevier, 32–38.
- Koyama, Shūzō 小山 修三  
1984 *Jōmon jidai: konpyūta kōkogaku ni yoru fukugen*. 縄文時代 : コンピュータ考古学による復元 [The Jōmon period: Reconstruction through computer archaeology]. Tōkyō: Chūō Kōronsha 中央公論社.
- Kumar, Ann  
2009 *Globalizing the Prehistory of Japan: Language, Genes and Civilization*. Routledge Studies in the Early History of Asia 6. London: Routledge.
- 2013 “Opinion and Comment: Response to Review by John Bentley,” *The Journal of Japanese Studies* 39/2: 513–515.

- Lansing, Stephen J., Cheryl Abundo, Guy S. Jacobs, Elsa G. Guillot, Stefan Thurner, Sean S Downey, Lock Yue Chew, *et al.*  
 2017 “Kinship Structures Create Persistent Channels for Language Transmission,” *PNAS* 114/49: 12910–12915.
- Lee, Gyoung-Ah  
 2011 “The Transition from Foraging to Farming in Prehistoric Korea,” *Current Anthropology* 52/4: 307–329.
- Lee, Ki-moon and S. Robert Ramsey  
 2011 *A History of the Korean Language*. Cambridge: Cambridge UnivPress.
- Lee, Peter H.  
 2003 “Hyangga.” Peter H. Lee (ed.): *A History of Korean Literature*. Cambridge: Cambridge UnivPress, 66–86.
- Lee, Sean and Toshikazu Hasegawa  
 2011 “Bayesian Phylogenetic Analysis Supports an Agricultural Origin of Japonic Languages,” *Proceedings of the Royal Society B* 278/1725: 3662–3669.
- Lee, SeungJae  
 2013 “A Deciphering of Two Silla Poetry Fragments Inscribed on Wooden Tablets,” *Seoul Journal of Korean Studies* 26/1: 129–174.  
 2014 “Old Korean Writing on Wooden Tablets and Its Implications for Old Japanese Writing,” Jack Davis (trans.), *Seoul Journal of Korean Studies* 27/2: 151–185.
- Lewin, Bruno  
 1965 “Die Japanischen Beziehungen Zu Den Emishi Um Das Jahr 800,” *Oriens* 18/19: 304–326.  
 1980 “Sprachkontakte Zwischen Paekche Und Yamato In Frühgeschichtlicher Zeit,” *Asiatische Studien* 34: 167–188.
- Li, Hui, Bo Wen, Shu-Juo Chen, Bing Su, Patcharin Pramoonjago, Yangfan Liu, Shangling Pan *et al.*  
 2008 “Paternal Genetic Affinity between Western Austronesians and Daic Populations,” *BMC Evolutionary Biology* 8/146, 1–12.
- Littleton, C. Scott  
 1995 “Yamato-Takeru: An ‘Arthurian’ Hero in Japanese Tradition,” *Asian Folklore Studies* 54: 259–274.
- Lu, Tracey  
 1998 *The Transition from Foraging to Farming and the Origin of Agriculture in China*. Dissertation. Australian National University.  
 2012 “Periphery or Land of Cultural Dynamics: Rethinking Prehistoric South China,” *Documenta Praehistorica* 39: 111–135.
- Malyarchuk, Boris, Miroslava Derenko, Galina Denisova, Marcin Wozniak, Tomasz Grzybowski, Irina Dambueva and Ilia Zakharov  
 2010 “Phylogeography of the Y-Chromosome Haplogroup C in Northern Eurasia,” *Annals of Human Genetics* 74/6: 539–546.
- Martin, Samuel Elmo  
 1966 “Lexical Evidence relating Korean to Japanese,” *Language: Journal of the Linguistic Society of America* 42/2: 185–251.  
 1987 *The Japanese Language through Time*. New Haven: Yale UnivPress.
- Matsumoto, Yoshio 松本 芳夫  
 1944 “Kumaso/Hayato-Ron 熊襲・隼入論 [Kumaso/Hayato Discussion],” *Shigaku* 22/4: 371–424.
- Matsumoto, Tomaru 松元 十丸  
 1971 *Kodai Kumaso ōkoku* 古代クマソ王国 [The Ancient Kumaso Kingdom]. Tokyo: Tairiku Shobō.
- Miller, Roy Andrew  
 1971 *Japanese and the Other Altaic Languages*. Chicago: University of Chicago Press.  
 1974 “The Origins of Japanese (review),” *Monumenta Nipponica* 29/1: 93–102.  
 1979 “Some Old Paekche Fragments,” *Journal of Korean Studies* 1: 3–69.

- 1986 "Tamil and Japanese?" *Bulletin of the School of Oriental and African Studies* 49/3: 557–560.
- 2003 "A third Pillar of the Altaic Hypothesis," *Acta Orientalia Academiae Scientiarum Hungaricae* 56/2–4: 201–236.
- Mirabal, Sheyla, Alicia M. Cadenas, Ralph Garcia-Bertrand and Rene J. Herrera  
2013 "Ascertaining the Role of Taiwan as a Source for the Austronesian Expansion," *American Journal of Physical Anthropology* 150/4: 551–564.
- Miyake, Marc Hideo  
2003 "Philological Evidence for \*e and \*o in Pre-Old Japanese," *Diachronica* 20/1: 83–137.
- Miyamori, Daisuke, Noboru Ishikawa, Nozomi Idota, Yasuhiro Kakiuchi, Stuart McLean, Tadaichi Kitamura and Hiroshi Ikegaya  
2015 "Tracing Jomon and Yayoi Ancestries in Japan Using ALDH2 and JC Virus Genotype Distributions," *Investigative Genetics* 6/14: 1–5.
- Miyamoto, Kazuo  
2016 "Archaeological Explanation for the Diffusion Theory of the Japonic and Koreanic Language," *Japanese Journal of Archaeology* 4/1: 53–75.
- Mori, Kōichi 森 浩一  
2013 "Wajinden Wo Teineini Yomu Koto Kara 倭人伝を丁寧に読むことから [From Reading Wajinden Carefully]," The Museum, Archaeological Institute of Kashihara, Nara Prefecture 奈良県立橿原考古学研究所附属博物館 (ed): *Umi de Tsunagaru Yamato to Chūgoku — Yamataikoku No Shūben Sekai* 海でつながる倭と中国—邪馬台国の周辺世界 [Wa and China That Are Connected by the Sea: The Surrounding World of Yamatai]. Tokyo: Shinsensha 新泉社, 12–41.
- Murayama, Shichirō 村山 七郎  
1972 "Japanese and the Other Altaic Languages (review)," *Monumenta Nipponica* 27/4: 463–467.  
1976 "The Malayo-Polynesian Component in the Japanese Language," *Journal of Japanese Studies* 2/2: 413–436.
- Murayama, Shichirō 村山 七郎 and Taryō Ōbayashi 大林 太良  
1973 *Nibongo No Kigen* 日本語の起源 [The Origins of Japanese]. Tōkyō: Kōbundō.
- Nagayama, Shūichi 永山 修一  
2009 *Hayato to Kodai Nihon*. Kodaishi Sensho 6 隼人と古代日本—古代史選書 6. [The Hayato and Ancient Japan. Ancient History Anthology 6]. Tokyo: Dōseisha.
- Nakagome, Shigeki, Takehiro Sato, Hajime Ishida, Tsunehiko Hanihara, Tetsutaro Yamaguchi, Ryosuke Kimura, Shuhei Mano and Hiroki Oota  
2015 "Model-Based Verification of Hypotheses on the Origin of Modern Japanese Revisited by Bayesian Inference Based on Genome-Wide SNP Data," *Molecular Biology and Evolution* 32/6: 1533–1543.
- Nakamura, Akizō 中村明蔵  
1996 *Kumaso No Kyokō to Jitsuzō: Tsukuridasareta Hangyakushazō* クマソの虚構と実像—つくり出された反逆者像 [Fact and Fiction about the Kumaso: The constructed image of the rebels]. Tokyo: Maruyama Gakugei Tosho 丸山学芸図書.
- Nam, Pung-hyun  
2012 "Old Korean." Nicolas Tranter (ed): *The Languages of Japan and Korea*. London: Routledge.
- Nasu, Hiroo and Arata Momohara  
2016 "The Beginnings of Rice and Millet Agriculture in Prehistoric Japan," *Quaternary International* 397: 504–512.
- Natsui, Takato 夏井 高人  
2016 '*Nihonshoki*' to '*Tōshikaden*' No Bukkyō Denrai Kiji 『日本書紀』と『藤氏家伝』の仏教伝来記事 [Articles on the Introduction of Buddhism from *Nihon Shoki* and *Tōshi Kaden*] (Essay). Tokyo: The Alpine Garden Society of Tokyo Sanyuri 東京山草会ランユリ部会.
- Naumann, Nelly  
1988 *Die einheimische Religion Japans: Teil 1: Bis Zum Ende Der Heian-Zeit*. Leiden: E.J. Brill.  
1996 *Die Mythen des alten Japan*. München: Beck.

- Nienhauser, William H. (ed.)  
 2006 *The grand scribe's records. Volume V.1: The hereditary houses of Pre-Han China, part 1.* Bloomington: Indiana UnivPress.
- Nishioka, Hideo and W. Egbert Schenck  
 1937 "An Outline of Theories Concerning the Prehistoric People of Japan," *American Anthropologist* 39/1: 23–33.
- Nogami, Michio 野上 道男  
 2012 *Gishiwajinden, Himiko, Nibonshoki o Tsunagu Ito* 魏志倭人伝・卑弥呼・日本書紀をつなぐ糸 [Connection of the Book of Wei (Volume Japan), Empress Himiko and Nihon-Shoki]. Tokyo: Kokinshoin 古今書院.
- Nonaka, I., K. Minaguchi and N. Takezaki  
 2007 "Y-Chromosomal Binary Haplogroups in the Japanese Population and Their Relationship to 16 Y-STR Polymorphisms," *Annals of Human Genetics* 71/4: 480–495.
- Ōbayashi, Taryō  
 1960 "Die Amaterasu-Mythe im alten Japan und die Sonnenfinsternismythe in Südostasien," *Ethnos* 25/1–2: 20–43.  
 1966 "Origins of Japanese Mythology: Especially of the Myths of the Origin of Death." In: *Folk Cultures of Japan and East Asia*. Monumenta Nipponica Monographs 25. Tokyo: Sophia UnivPress, 1–15.  
 1975 *Hayato* 隼人 [Hayato]. Tokyo: Shakai Shisōsha.  
 1977 "The Origins of Japanese Mythology," *Acta Asiatica* 31: 1–23.  
 1984 "Japanese Myths of Descent from Heaven and Their Korean Parallels," *Asian Folklore Studies* 43/2: 171–184.
- Oka, Masao  
 1933 *Kulturschichten in Alt-Japan*. Dissertation. University of Vienna.
- Ōno, Susumu 大野 晋  
 1970 *The Origin of the Japanese Language*. Tokyo: Kokusai Bunka Shinkokai [<sup>1</sup>1957].  
 1980 *Sound Correspondences between Tamil and Japanese*. Tokyo: Gakushuin.  
 1989 "The Genealogy of the Japanese Language," *Gengo Kenkyū* 95: 32–63.
- Palmer, Edwina  
 2010 "Out of Sundaland: The Provenance of Selected Japanese Myths," In: *Globalization, Localization, and Japanese Studies in the Asia-Pacific Region*. Kyōto: Kokusai Nihon Bunka Kenkyū Sentā, 67–88.
- Pearson, Richard  
 2013 *Ancient Ryukyu: An Archaeological Study of Island Communities*. Honolulu: University of Hawai'i Press.
- Pellard, Thomas  
 2005 "Koguryo, the Language of Japan's Continental Relatives: An Introduction to the Historical-Comparative Study of the Japanese-Koguryoic Languages with a Preliminary Description of Archaic Northeastern Middle Chinese (Review)," *Korean Studies* 29: 167–170.  
 2010 "A Linguistic History of the Forgotten Islands: A Reconstruction of the Protolanguage of the Southern Ryukyus. By John R. Bentley (review)," *Diachronica* 27/1: 170–176.  
 2011 "The Historical Position of the Ryukyuan Languages," *Historical Linguistics in the Asia-Pacific Region and the Position of Japanese*. Symposium in Osaka, Japan, 55–64.  
 2015 "The Linguistic Archeology of the Ryukyu Islands." In Heinrich Patrick, Shinsho Miyara and Michinori Shimoji (eds): *Handbook of the Ryukyuan languages: History, structure, and use*. Berlin: De Mouton Gruyter, 13–37.
- Philippi, Donald L.  
 1969 *Kojiki*. Princeton and Tokyo: Princeton UnivPress and Univ of Tokyo Press.

Pietrusewsky, Michael

- 2013 “Biological Connections across the Sea of Japan: A Multivariate Comparison of Ancient and More Modern Crania from Japan, China, Korea, and Southeast Asia.” Ekaterina Pechenkina and Marc Oxenham (eds): *Bioarchaeology of East Asia: Movement, Contact, Health*. Gainesville: UnivPress of Florida, 144–178.

Piggott, Joan R.

- 1989 “Sacral Kingship and Confederacy in Early Izumo,” *Monumenta Nipponica* 44/1: 45–74.

Rhee, Song-Nai, C. Melvin Aikens, Sung-Rak Choi and Hyuk-Jin Ro

- 2007 “Korean Contributions to Agriculture, Technology, and State Formation in Japan: Archaeology and History of an Epochal Thousand Years, 400 B.C.–A.D. 600,” *Asian Perspectives* 46/2: 404–459.

Robbeets, Martine

- 2004 “Swadesh 100 on Japanese, Korean and Altaic,” *Tokyo University Linguistic Papers* 23: 99–118.
- 2005 *Is Japanese Related to Korean, Tungusic, Mongolic and Turkic?* Turcologica 64. Wiesbaden: Harrassowitz.
- 2007 “How the actional Suffix Chain connects Japanese to Altaic,” *Turkic Languages* 11/1: 3–58.
- 2008 “If Japanese is Altaic, how can it be so simple?” Alexander Lubotsky, Jos Schaeken and Jeroen Wiedenhoef (eds): *Evidence and Counter-Evidence: Essays in Honour of Frederik Kortlandt, Volume 2: General Linguistics. Studies in Slavic and General Linguistics*. Amsterdam: Rodopi, 337–367.
- 2017 “Austronesian influence and Transeurasian ancestry in Japanese,” *Language Dynamics and Change* 7/2: 210–251.

Rogers, Michael C.

- 1993 “Accounts of the Eastern Barbarians,” Peter H. Lee (ed.): *Sourcebook of Korean Civilization. Volume 1: From Early Times to the Sixteenth Century*. New York: Columbia UnivPress, 13–24.

Saiki, Kazunobu 佐伯 和信 and Tetsuaki 分部 哲秋 Wakebe

- 2012 “Minamikyūshū Kofunjin No Mitokondoria DNA Kaiseki No Genjō 南九州古墳人のミトコンドリア DNA 解析の現状 [Status Quo of the Analysis of Mitochondrial DNA of the Kofun People of Southern Kyūshū].” Takigawa Wataru 瀧川 渉 (ed): *Kotsu Kōkogaku to Emishi/Hayato 骨考古学と蝦夷・隼人 [Osteological Archaeology and Emishi/Hayato]*. Shimin No Kōkogaku 市民の考古学 12. Tokyo: Dōseisha, 105–25.

Sakiyama, Osamu 崎山 理

- 2012 “Nihongo no kongō-teki tokuchō: Ōsutoroneshia sogo kara kodai nihongo e oto hōsoku to imi henka 日本語の混合的特徴：オーストロネシア祖語から古代日本語へ音法則と意味変化 [Japanese as a Mixed Language: Sound Law and Semantic Change from Proto Austronesian to Ancient Japanese],” *Kokuritsu Minzokugaku Hakubutsukan Kenkyū Hōkoku* 36/3: 353–393.

Satō, Tomomi 佐藤 知己

- 2010 “Ainugo No Fukkō to Ainugo Kenkyū アイヌ語の復興とアイヌ語研究 [Revival of Ainu Language and Study of Ainu Language],” Hokkaidō Daigaku Ainu Senjūmin Kenkyū Sentā 北海道大学アイヌ・先住民研究センター (ed): *Ainu Kenkyū no Genzai to Mirai アイヌ研究の現在と未来 [The Present and Future of Ainu Studies]*. Hokudai Ainu, Senjūmin Kenkyū Sentā Sōsho 1. Sapporo: Hokkaidō Daigaku Shuppankai, 278–303.

Satō, Yōichirō 佐藤 洋一郎

- 1992 “Nihon No Ine No Denpa Keiro 日本のイネの伝播経路 [The Routes of Introduction of Rice in Japan],” *Journal of the Brewing Society of Japan* 87/10: 732–738.

Schuessler, Axel

- 2009 *Minimal Old Chinese and Later Han Chinese*. Honolulu: University of Hawai’i Press.

Seeley, Christopher

- 1991 *A History of Writing in Japan*. Leiden: Brill.

Serafim, Leon

- 2003 “When and from Where did the Japonic Language Enter the Ryukyus? A Critical Comparison of Language, Archaeology, and History.” Alexander Vovin and Toshiki Osada (eds): *Perspectives on the Origins of the Japanese Language*. Nichibunken Japanese Studies Series 31. Kyoto: International Research Center for Japanese Studies, 463–476.

- 2008 "The uses of Ryukyuan in understanding Japanese language history." Bjarke Frellesvig and John Whitman (eds): *Proto-Japanese: Issues and Prospects*. Amsterdam: John Benjamins Publishing, 79–102.
- Seyock, Barbara
- 2003 "The Hirabaru Site and Wajinden Research: Notes on the Archaeology of the Kings of Ito," *NOAG* 173–174: 207–225.
- 2004 *Auf den Spuren der Ostbarbaren: Zur Archäologie protohistorischer Kulturen in Südkorea und Westjapan*. Bunka 8. Münster: Lit-Verl.
- Shimoji, Michinori
- 2010 "Ryukyuan Languages: An Introduction." Shimoji, Michinori and Thomas Pellard (eds): *An Introduction to Ryukyuan Languages*. Tokyo: ILCAA, 1–13.
- Shinoda, Chiwaki
- 2008 "Melusine and Toyotamahime: Dissemination of a Culture by Sea," *Diogenes* 218: 59–64.
- Shinoda, Ken'ichi 篠田 謙一
- 2016 "DNA de yomu nihonjin no kigen DNA で読む日本人の起源 [Origin of the Japanese Population Viewed from DNA Data]," *Journal for the Comparative Study of Civilizations* 21: 17–40.
- Shitara, Hiromi 設楽 博己
- 2014 "Nōkō Bunkafukugō to Yayoi Bunka 農耕文化複合と弥生文化 [Yayoi Culture as a Complex of Multiple Farming Cultures]," *Bulletin of the National Museum of Japanese History* 185: 449–469.
- Shōda, Shin'ya
- 2007 "A Comment on the Yayoi Period Dating Controversy," *Bulletin of the Society for East Asian Archaeology* 1: 1–7.
- Shultz, Edward J. and Hugh H. W. Kang (trs)
- 2012 *The Silla Annals of the Samguk Sagi*. Seongnam: AKS Press.
- Solnit, David B.
- 1992 "Japanese/Austro-Tai, by Paul K. Benedict (review)," *Language* 68/1: 188–196.
- Song, Ho Jung
- 2004 "The Formation of Gojoseon and Its Social Characteristics," *The Review of Korean Studies* 7/1: 95–113.
- Starostin, Sergei, Anna Dybo and Oleg Mudrak
- 2003 *Etymological Dictionary of the Altaic Languages*. Leiden: Brill.
- Starostin, Sergei
- 1991 *Altajskaja Problema i Proisxoždenie Japonskogo Jazyka* [The Altaic Problem and the Origin of the Japanese Language]. Moscow: Nauka.
- Stevens, Chris J. and Dorian Q. Fuller
- 2017 "The spread of agriculture in eastern Asia: Archaeological bases for hypothetical farmer/language dispersals," *Language Dynamics and Change* 7/2: 152–186.
- Strassberg, Richard E.
- 2002 *A Chinese Bestiary: Strange Creatures From the Guideways Through Mountains and Seas*. Berkeley: University of California Press.
- Summerhayes, Glenn R. and Atholl Anderson
- 2009 "An Austronesian Presence in Southern Japan. Early Occupation in the Yaeyama Islands," *Ippa Bulletin* 29: 76–91.
- Takahashi, Ryūzaburō
- 2009 "Jomon, Yayoi, and Ainu in Japan: Symbiotic Relations between Paddy-Field Rice Cultivators and Hunter-Gatherer-Fishers in Japanese Prehistory: Archaeological Considerations of the Transition from the Jomon Age to the Yayoi Age," *Senri Ethnological Studies* 73: 71–97.
- Takamiya, Hiroto
- 2001 "Introductory Routes of Rice to Japan: An Examination of the Southern Route Hypothesis," *Asian Perspectives* 40/2: 209–226.



- Tanaka, Masashi, Vicente M. Cabrera, Ana M. González, José M. Larruga, Takeshi Takeyasu, Noriyuki Fuku, Li-Jun Guo *et al.*  
 2004 “Mitochondrial Genome Variation in Eastern Asia and the Peopling of Japan,” *Genome Research* 14: 1832–1850.
- Tanudirjo, Daud Aris  
 2014 “Prehistory of the Indonesian Archipelago.” Colin Renfrew and Paul Bahn (eds): *The Cambridge World Prehistory. Volume 1: Africa, South and Southeast Asia and the Pacific*. Cambridge: Cambridge UnivPress, 504–520.
- Thorpe, Maner Lawton  
 1983 *Ryūkyūan Language History*. Dissertation. Los Angeles: University of Southern California.
- Trairong, Suwankiri and Ben-li Wu  
 2016 *The unbroken chain: State Wu in ancient China and in Siam (Thailand)*. Hongkong: China Intl Culture Press.
- Tsunoda, Ryūsaku 角田 柳作 and L. Carrington Goodrich  
 1951 *Japan in the Chinese Dynastic Histories*. Perkins Asiatic Monograph 2. South Pasadena: P. D. and Ione Perkins.
- Umeda, Hiroko  
 2004 “The Origins of Isolated Languages: In the Cases of Japanese and Basque,” *The Bulletin of Musashino Gakuin University* 1: 29–38.
- Unger, James Marshall  
 1990 “Summary report of the Altaic panel.” Baldi, Philip (ed): *Linguistic Change and Reconstruction Methodology. Part 1*. Berlin: De Gruyter, 479–482.  
 2001 “Layers of Words and Volcanic Ash in Japan and Korea,” *Journal of Japanese Studies* 27/1: 81–111.  
 2003 “Substratum and Adstratum in Prehistoric Japanese.” Henning Andersen (ed): *Language Contacts in Prehistory: Studies in Stratigraphy*. Amsterdam: Philadelphia, 241–258.  
 2009 *The Role of Contact in the Origins of the Japanese and Korean Languages*. Honolulu: University of Hawai‘i Press.
- Vovin, Alexander  
 1993 “Long Vowels in Proto-Japanese,” *Journal of East Asian Linguistics* 2/2: 125–134.  
 1994 “Is Japanese related to Austronesian?” *Oceanic Linguistics* 33/2: 369–390.  
 1998 “Japanese Rice Agriculture Terminology and Linguistic Affiliation of Yayoi Culture.” Roger Blench and Matthew Spriggs (eds): *Archaeology and Language II: Correlating Archaeological and Linguistic Hypotheses*. One World Archaeology 29. London and New York: Routledge, 366–378.  
 1999 “Altaic, so far,” *Migracijske Teme* 15/1–2: 155–213.  
 2009 “Japanese, Korean, and Other ‘Non-Altaic’ Languages,” *Central Asiatic Journal* 53/1: 105–147.  
 2010 *Koreo-Japonica: A Re-Evaluation of a Common Genetic Origin*. Honolulu: University of Hawai‘i Press.  
 2013 “From Koguryō to T’amna: Slowly Riding to the South with Speakers of Proto-Korean,” *Korean Linguistics* 15/2: 222–240.  
 2016 “On the Linguistic Prehistory of Hokkaidō.” Ekaterina Gruzdeva and Juha Janhunen (eds): *Crosslinguistics and Linguistic Crossings in Northeast Asia*. Studia Orientalia 117. Helsinki: Finnish Oriental Society, 29–38.  
 2017 “Origins of the Japanese Language,” *Oxford Research Encyclopedia of Linguistics*.  
<http://linguistics.oxfordre.com/view/10.1093/acrefore/9780199384655.001.0001/acrefore-9780199384655-e-277> (2018-11-10).
- Wang, Chuan-Chao and Hui Li  
 2013 “Inferring Human History in East Asia from Y Chromosomes,” *Investigative Genetics* 4/11: 1–10.
- Wang, William S.-Y. and Mieko Ogura  
 1996 “Explorations in the Origins of the Japanese Language,” In Keiichi Omoto (ed): *Interdisciplinary Perspectives on the Origins of the Japanese: International Symposium, September 25-28*. Kyoto: International Research Center for Japanese Studies, 309–334.

- Wang, Zhengping  
2005 *Ambassadors from the Islands of Immortals*. Honolulu: University of Hawai'i Press.
- Whitman, John Bradford  
1985 *The Phonological Basis for the Comparison of Japanese and Korean*. Dissertation. Cambridge, Harvard University.  
2010 "The Role of Contact in the Origins of the Japanese and Korean Languages (review)," *The Journal of Asian Studies* 69/4: 1268–1270.  
2011 "Northeast Asian Linguistic Ecology and the Advent of Rice Agriculture in Korea and Japan," *Rice* 4/3–4: 149–158.
- Whitman, John and Mark J. Hudson  
2017 "Millets, rice, and farming/language dispersals in East Asia," *Language Dynamics and Change* 7/2: 147–151.
- Wittkamp, Robert F.  
2018 "The Body as a Mode of Conceptualization in the Kojiki Cosmogony," *Bulletin of the Institute of Oriental and Occidental Studies, Kansai University* 51: 47–64.
- Witzel, Michael  
2005 "Vala Und Iwato: The Myth of the Hidden Sun in India, Japan and Beyond," *Electronic Journal of Vedic Studies* 12/1: 1–69.
- Yamada, Mieko  
2009 "Westernization and Cultural Resistance in Tattooing Practices in Contemporary Japan," *International Journal of Cultural Studies* 12/4: 319–338.
- Yasuda, Yoshinori 安田 喜憲  
2008 "Climate Change and the Origin and Development of Rice Cultivation in the Yangtze River Basin, China," *Ambio Special Report* 14: 502–506.  
2009 *Inasaku Gyorō Bunmei: Chōkōbunmei Kara Yayoi Bunka e* 稲作漁撈文明—長江文明から弥生文化へ [Rice Cultivation and Fishing Culture: From the Yangtze Civilization to Yayoi Culture]. Tokyo: Yuzankaku 雄山閣.
- Yoshida, Atsuhiko  
2015 "The God Okuninushi and the Trifunctional System of the Indo-Europeans," *Comparative Mythology* 1/1: 73–80.
- Young, John  
1958 *The Location of Yamatai: A Case Study in Japanese Historiography, 720–1945*. Baltimore: The John Hopkins Press.
- Zgusta, Richard  
2015 *The Peoples of Northeast Asia through Time: Precolonial Ethnic and Cultural Processes along the Coast between Hokkaidō and the Bering Strait*. Leiden: Brill.
- Zheng, Hong-Xiang, Shi Yan, Zhen-Dong Qin, Yi Wang, Jing-Ze Tan, Hui Li and Li Jin  
2011 "Major Population Expansion of East Asians Began before Neolithic Time: Evidence of MtDNA Genomes," *PLOS ONE* 6/10: 1–7.

## **Appendix A: Abstract (English)**

Numerous studies on the origins of the Japanese languages have failed to deliver a satisfactory answer. This is in part due to the complex nature of the problem. In this thesis I have applied a multidisciplinary approach to utilize data from a variety of fields that provide a versatile picture of the historical development of the Japanese language.

My research suggests that the homeland of the Japonic language family may have been in the lower Yangtze River Valley, from where its speakers moved to the Korean peninsula and eventually into Japan during the Yayoi period. This spread is associated with the dispersal of wet-rice agriculture from the area south of the Yangtze River via the northeastern Asian mainland, where it was in contact with cultures cultivating millets, and through the Korean peninsula.

The people from the supposed homeland are likely related to the Pre-Austronesians. Therefore, this hypothesis can be tested in future research by locating language data for Pre-Austronesian and comparing them with reconstructed proto-Japonic terms.

## **Appendix B: Abstract (German)**

Zahlreiche Untersuchung zu den Ursprüngen der japanischen Sprachen haben keine zufriedenstellende Antwort geliefert. Das ist zum Teil der Komplexität der Fragestellung geschuldet. In dieser Arbeit habe ich eine multidisziplinäre Herangehensweise verfolgt, um Daten von einer Vielzahl von Bereichen auszuwerten, welche ein vielseitiges Bild der historischen Entwicklung der japanischen Sprache liefern.

Meine Arbeit legt nahe, dass sich die Urheimat der japonischen Sprachfamilie im unteren Yangtse Flusstal befindet, woher deren Sprecher während der Yayoi-Zeit auf die koreanische Halbinsel und schließlich nach Japan zogen. Diese Ausbreitung geht einher mit der Verbreitung von Nassreisenanbau von der Region südlich des Yangtses über das nordostasiatische Festland, wo es in Kontakt mit Kulturen die Hirse anbauten hatte, und durch die koreanische Halbinsel.

Die Einwohner der vermuteten Urheimat sind wahrscheinlich verwandt mit den Ur-Austronesiern. Deshalb kann diese Hypothese in zukünftiger Forschung überprüft werden, indem man Sprachdaten der Ur-Austronesier ausfindig macht und diese mit rekonstruierten Begriffen von Proto-Japanisch vergleicht.