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CHAPTER 11

# The genealogy of the dialects on the Sea of Japan coast and Kyūshū

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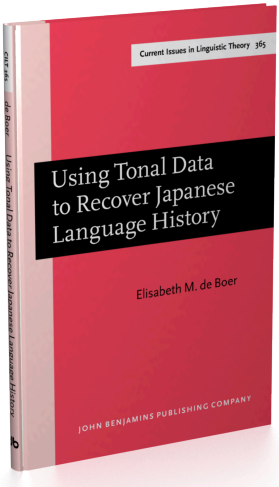


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CHAPTER 11

# The genealogy of the dialects on the Sea of Japan coast and Kyūshū

The foregoing comparison of compounds shows that the Gairin subtype dialects arose out of the precursor of the Nairin and Chūrin subtypes; the original Gairin dialect not a first-order daughter of proto-Japanese. Indeed, if it had been and simply spread from a single location to the present-day four Gairin ranges, we would be hard pressed to explain why the dialects of the Izumo and the Tōhoku types, each on either side of the Noto peninsula, share so many features absent in dialects between them (de Boer 2010: 165–177). This does not mean that migrations did not play a role in the distribution of Gairin dialects, but only that we need a suitable diachronic theory, specifically one in which Izumo dialect spread along the Sea of Japan coast in two stages (de Boer 2020).

Certain features are shared by Tōhoku, Noto, and all Izumo dialects: the realization of /e/ and /o/ as raised [e̝] and [o̝]; and the realizations of /i/ and /u/ as centralized [ɨ] and [ʉ]. This brought all these vowels phonetically close together, reducing the oppositions heard more clearly in other Japanese dialects. In central Izumo, Noto, and large parts of the Tōhoku region this has led to two vowel mergers: (1) word-initial /i/ and /i/ after a vowel is lowered to [e̝] and merges with /e/ (Figure 11.1); the high vowels /i/ and /u/ merge after coronal consonants (Figure 11.2).[42]

There are, however, also innovations in segmental phonology shared by central Izumo and Tōhoku that are *not* found in the Noto region, such as palatalization of /ki/ to [kɕʲi̞] or [tɕʲi̞] and lowering of /u/ in absolute initial position and after certain consonants to [o̝], resulting in a merger with /o/. Furthermore, the tone systems of Izumo and Tōhoku dialects are also closer to one another than to the tone system of the Noto region, which lies between them geographically. In Izumo and Tōhoku tone, classes 2.1 and 2.2 and classes 3.1 and 3.2 have merged (the defining trait of Gairin type tone systems); these mergers are not found on the Noto peninsula.

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**42.** In peripheral Izumo and part of eastern Iwate, the distinction between /i/ and /u/ is maintained even though both vowels are centralized.

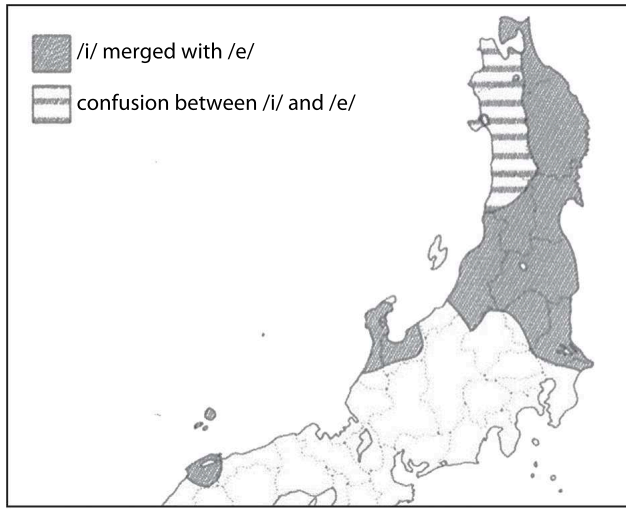


**Figure 11.1** Lowering of word initial /i/, and /i/ following vowels to /e/. Adapted from: Koizumi (2013: 163)

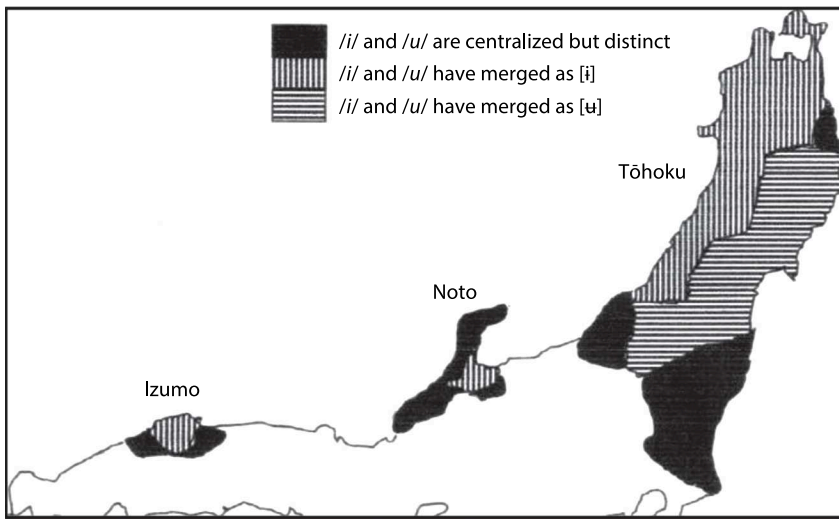


**Figure 11.2** Merger of /i/ and /u/ after coronal consonants. Adapted from: Kamei, Kōno & Chino (1989: 1760)

There are two kinds of Gairin subtype tone systems, A and B. In the Gairin B, a further innovation has occurred whereby /H/ tone has shifted away from syllables containing the high vowels /i/ and /u/. This change can be seen in central Izumo, but not in Gairin A, preserved in the eastern and western periphery of the Izumo region. Gairin B is also found in almost all of the Tōhoku region, excluding

the Shimokita Peninsula and coastal parts of Iwate, the two areas farthest from the Sea of Japan coast (Figure 11.1). This suggests that the Gairin B innovation entered the Tōhoku region from the Sea of Japan coast.

We have seen that the oldest theory attempting to explain the disjoint distribution of shared dialect features in Japan (Fujiwara 1951) assumed that there had originally been two dialect areas, a Pacific coast 'front of Japan' dialect area and a Sea of Japan coast 'back of Japan' dialect area. When the central Japanese Yamato state centered on Nara and, later, Kyōto, became predominant, it spread and displaced the Sea of Japan dialect, separating its range into two disjoint regions. The theory proposed by Kindaichi (1964) saw all the agreements between the dialects as the result of independent parallel developments, which was in line with his theory about the development of the Japanese tone systems. He argued that the farther dialects were removed from the cultrual center of Japan, the fewer constraints there were on the collapse of phonological distinctions.

This theory of independent parallel developments, however, is implausible for two important reasons. First, the allegedly unrelated innovations in the western and eastern parts of the of the 'split' region agree in great detail. Second, the hypothesis of a uniform dialect range along the coast of the Sea of Japan stretching all the way from Izumo to Tōhoku that was broken in two fails to explain why the agreements between Izumo and Tōhoku are stronger than the resemblances of either with the dialects of the Noto region. A better hypothesis is that the dialect of Izumo was carried first to the Noto region, and later, after further innovations had occurred in the dialect of Izumo, from Izumo to the Tōhoku region.

## 11.1 Archaeological and mythological evidence for a migration from Izumo to Koshi

Nowadays Izumo is one of the poorest and most sparsely populated regions of Japan.[43] In the Mid to Late Yayoi periods (450 BCE–250 CE), however, it was the great rival of the Yamato kingdom of central Japan and the focal point of a wide-ranging maritime trade network that included the Sea of Japan coast, the Ryūkyū islands, Kyūshū, Korea, and China. Izumo formed alliances with other

43. This used to make the attention paid to Izumo in the myths contained in the *Kojiki* (712) and the *Nihon shoki* (720), chronicles from the central Japanese Yamato kingdom, into somewhat of a mystery. When, in 1984, a cache of 358 bronze swords dated to the Middle/Late Yayoi transition was unearthed at Izumo (more artifacts of this kind than had been excavated in all other parts of Japan combined), it became clear that the prominence of Izumo in the Japanese chronicles had been more than a literary device.

regions along the Sea of Japan coast (Watanabe 1995) and had an especially close alliance with both the region of Koshi on the Noto peninsula and coastal Toyama (Torrance 2016). In this period, the centralized vowel system typical of Izumo, the conditioned merger of /i/ and /e/, and the tone system that still preserved class 2.5 must have spread from Izumo to Koshi.

At some point, the conditioned merger of /i/ and /u/ developed in central Izumo and spread to Koshi as well, specifically to the area of what is now Toyama City. The highly distinctive double-rectangle burial mounds (*zenpō-kōhō kofun*) that are typical of the Izumo region are also found in Koshi, where they have been dated to 100–250 CE (Maeda 2007: 6). The cluster of burial mounds in the location of what is now Toyama City coincides exactly with the area where there is a similar merger of /i/ and /u/ as in central Izumo (cf. Figs. 11.3 and 11.4). This suggests that this particular agreement in segmental phonology dates back to migration from Izumo in this period from 100 to 250 CE.

The connection between Izumo and Koshi also finds confirmation in mythology. The *Izumo fudoki* (733), a historical record that originates in Izumo, contains the 'land pulling myth' that tells of the god Omizuno pulling land from Oki Island and Tsutsu Cape in Koshi and attaching it to Izumo in order to make Izumo larger. Pointing out the similarity in the geography of the myth and the distribution of projected-four-cornered burial mounds, Carlqvist (2010) argues that the land-pulling myth has very old roots, and depicts the sphere of influence of Izumo along the Japan Sea coast during the late Yayoi period.

The earlier innovations in Izumo were passed on to Koshi. Subsequent innovations in Izumo, such as the palatalization of /ki/, the conditioned merger of /u/ and /o/, the tone class mergers typical of the Gairin A tone system, and the loss of the distinction between classes 2.4 and 2.5, were passed on to the Tōhoku region, but by-passed Koshi.

In case of the changes in the tone system, there is some intriguing evidence from tone annotations added to manuscripts of *Kojiki* that give an indication of the time period in which they were written.

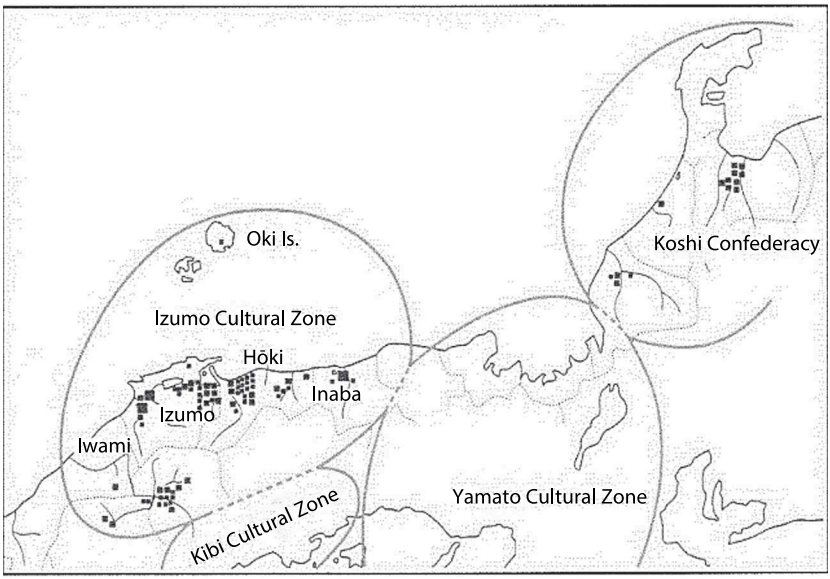


**Figure 11.3** Distribution of double-rectangle burial mounds in Izumo and Koshi. Adapted from: Torrance (2016: 15)

## 11.2 Dating /H/ tone reduction in Izumo

The next development in phonology concerned the tone system. I have stressed in earlier work (e.g., de Boer 2010) that the H tone reduction, which caused the transformation of Japanese into a pitch accent language, must have started in Western Japan. It is this development that led to the merger of tone classes 2.1 and 2.2 in the dialects that had assimilated the tone of case particles.

**Table 11.1** /H/ *tone reduction*

| Proto-Japanese | Difference in tone of particles | /H/ tone reduction | Modern dialects |
|---|---|---|---|
| 2.1 LL-L | LL-L | LL-L | ØØ-Ø |
| 2.2 LH-L | LH-L (Nairin, Chūrin) | LH-L | ØH-Ø |
| | LH-H (Gairin) | LH-H | ØØ-Ø |
| 2.3 HH-L | HH-L | LH-L | ØH-Ø |

Since all Ryūkyūan varieties share this merger, /H/ tone reduction must have occurred sometime before the 10th century, when the the Ryūkyū islands were

first settled from Kyūshū. In the MJ tone dot material which stemmed from central Japan, on the other hand, it is not yet visible until much later. It seems clear therefore that this simplification of the tone systems must have spread to central Japan from the west.

The oldest evidence for this change in tones can be found in notes added to certain words in manuscripts of *Kojiki* (712). These notes differ from the tone dot notations that came into use later and were attached to separate syllables. The *Kojiki* notes are part of the text, inserted after words, and indicate whole tone contours.

There are 34 of such notes in total. In one, we find the character for the Chinese going tone (去). The other 33 notes add the character for the Chinese rising tone (上). Quite a few of these are added to exclamations (*e* otoko, *e* otome, *e* hime),suggesting that the risin-knownhistoricalchangesinsegmentssug tone contour may have indicated surprise, as it does in modern Japanese. Since characters must be glossed, many of the marked morphemes are hard to identify, but in seventeen cases (Table 11.1), the identities of the critical morphemes are not hard to discern. They all form part of names of gods (OJ *kamwi*), places, or (in two cases) actual people. The vast majority of names in *Kojiki* do not have such notes, so it is understandable that the famous scholars Keichū (1640–1701) and Motoori Norinaga (1730–1801) explained them as indicating 'aberrant pronunciations', though they failed to explain in what way the pronunciations were 'aberrant'.

In Table 11.2, the critical names are given in OJ phonemics, in which, for instance, /pi, mye, kwo/ were distinct from /pwi, me, ko/, respectively. The names have been checked against the exhaustive glossary in Philippi 1968, which provides exact references to the chapters and lines in *Kojiki* where the names occur.[44] The MJ forms show the results of intervening changes in segmental phonemes.

Significantly, all the words attested in MJ belong to tone class 2.3, and many of the names are associated with Izumo or other places in western Japan, or with the principal deity of the great shrine at Izumo, Susa no wo. All this suggests that these notes may be early indications of /H/ tone reduction, whereby nouns of class 2.3 changed from /HH/ to /LH/. Although the oldest extant manuscripts of *Kojiki* date from the 14th c., the tone markings in the text could, assuming faithful transmission of the *urtext*, may indicate the surprise of some early scribe who heard portions of the text recited by someone not from the central capital area.

The fact that the two persons included were both related to Emperor Keitai is also interesting, as historians see him as a usurper to the throne. He was not from the central Japanese imperial lineage, and is thought to have come from Koshi, the ally of Izumo.

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**44.** In one case (12), I prefer a gloss different from Philippi's, viz. *kudo* for his *kama*.

**Table 11.2** Provenance of the names marked with the note 'rising' in the Kojiki

| | Name (OJ) | Remarks | MJ tones | Region |
|---|---|---|---|---|
| 1 | Toyo *kumo* nwo no kamwi | | *kumo* 'cloud' 2.3 | ? |
| 2 | Oku *yama* tu mi no kamwi | | *yama* 'mountain' 2.3 | ? |
| 3 | Opo *yama* kui no kamwi | | *yama* 'mountain' 2.3 | ? |
| 4 | Ame no *puki* wo no kamwi | Son of Izanagi and Izanami; an alternate name for Susa no wo | *huku* 'blow' deverbal noun 2.3 | Izumo |
| 5 | Opo *yama* tu mi no kamwi | Son of Izanagi and Izanami | *yama* 'mountain' 2.3 | Izumo |
| 6 | Soko tu *wata* tu mi no kamwi | Deities of, respectively, the bottom, middle depths, and surface of the sea of the Azumi seafaring clan | *wata* 'sea' class unclear | Northern Kyūshū & Izumo |
| 7 | Naka tu *wata* tu mi no kamwi | | | |
| 8 | Uwa tu *wata* tu mi no kamwi | | | |
| 9 | Itiki *sima* pimye no mikoto | | *sima* 'island' 2.3 | Northern Kyūshū |
| 10 | *Asi* na duti no kamwi | Mentioned in connection with Susa no wo | *asi* 'foot' 2.3 | Izumo |
| 11 | Pute *mimi* no kamwi | Female deity married to a descendant of Susa no wo | *mimi* 'ear' 2.3 | Izumo |
| 12 | Suga *kudo* yura tomi | Deity | *kudo* 'oven' 2.3 | Tajima-no kuni on the San'in (Izumo) coast |

**Table 11.2** *(continued)*

| | Name (OJ) | Remarks | MJ tones | Region |
|---|---|---|---|---|
| 13 | *Mimi* para | Plain in present-day Sakai-shi near Ōsaka | *mimi* 'ear' 2.3 | Central Japan |
| 14 | *Pwi* no kawa | River in Izumo | class unclear | Izumo |
| 15 | Sasikuni no *opo* kamwi | Deity of Sasikuni (location uncertain) | *oo* 'great' (adj.) | ? |
| 16 | *Tori* mye no mikwo | Ancestor of Emperor Keitai | *toru* 'take' deverbal noun 2.3 | Link with Koshi (Noto region) |
| 17 | *Mimi* no mikwo | Son of Emperor Keitai | *mimi* 'ear' 2.3 | Link with Koshi (Noto region) |

By the 8th century, tonal changes had occurred in Izumo that gave its dialect a Gairin type tone system. Long before, the influence that Izumo had exerted on Koshi in the mid Yayoi period had waned. It is therefore not surprising that innovations in segmental phonology shared by central Izumo and Tōhoku dialects are absent in the Noto region, such as palatalization of /ki/ to [kʲi̥] or [tɕi̥] and lowering of /u/ in absolute initial position and, after certain consonants, to [o̞], resulting in a merger with /o/. This skipping over of the Noto region suggests that these innovations developed in Izumo after the transition from Yayoi period to the Kofun period, and spread from there to the Tōhoku region together along with the tonal innovations that prefigured the Gairin tone systems, most likely in the late 6th to early 7th century.

## 11.3 Support from musicology and DNA research for the hypothesis of migration from Izumo to the Tōhoku region

In the course of the 6th century, Yamato increasingly spread its power into western Japan, creating alliances with the regions surrounding Izumo. Izumo was never conquered, but was gradually integrated into the central Yamato state. At least until the late 6th to early 7th centuries it remained an important and independent presence along the Japan Sea coast (Torrance 2016: 4).

Archeological finds suggest the arrival of a new population in northern Tōhoku in this period. Until the 5th century the pottery type of the northern

Tōhoku region and Hokkaidō had been identical. From the 5th to 7th centuries, this pottery type starts to disappear from northern Tōhoku, and is from then on restricted to Hokkaidō. This development has been taken to mean that the indigenous Epi-Jōmon population, speakers of an Ainu-related language, moved away from northern Honshū into Hokkaidō in that period (Hudson 2017).[45] The departure from Honshū by the Epi-Jōmon population may have been a case of avoidance of the authority of an agriculture-based central state. Such withdrawal by groups of hunter-gatherers is a phenomenon that frequently accompanies the formation of such states (Scott 2017). Hokkaidō was able to become a refuge in this sense, as its climate was not readily suitable for rice agriculture. At any rate, after the late 5th century there are no traces of habitation in the northern Tōhoku region for about a century, after which a new population arrives in the late 6th to early 7th century. This new population was archeologically indistinguishable from Kofun cultures elsewhere in Japan (Matsumoto 2018: 158–159).

In light of the dialect type found in the Tōhoku region today, what must have happened is that pre-existing trade routes along the Sea of Japan coast paved the way for immigration from Izumo to the depopulated northeast in this period. If the people arriving in the late 6th century were from Izumo – and not from the Kantō region to the south of the Tōhoku region as is usually assumed – they would have been able to spread the Izumo dialect rapidly over the entire sparsely populated area at that time. This could explain why the Izumo style tone system was perfectly preserved in northern Tōhoku.

The defining difference between the Gairin tone system of the Tōhoku region and the Chūrin tone system of the Kantō region to its south is in the division of the words into tone classes. The northern Tōhoku region has a clear Gairin type tone system. In southern Tōhoku on the other hand, in the eastern part, the tone system has disappeared while in the western part the reflexes are mixed between the Chūrin type and the Gairin B type (see again Figure 1.6). As is seen in other areas parts of Japan, it was most likely confusion between different tone systems that led to collapse of the system in the eastern part of southern Tōhoku.

Both the area with mixed reflexes and the area without lexical tone can be explained as resulting from migrants with two different tone systems arriving from two different directions: as the Pacific coast of Japan is hard to navigate safely, migrants using a Kantō tone and vowel system would have likely proceeded north along an overland route, while migrants from Izumo would have arrived more easily sailing north along the Sea of Japan coast.

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**45.** Epi-Jōmon refers to an indigenous population that maintained a Jōmon-type lifestyle into the Yayoi (800 BCE-250 CE) and subsequent Kofun (250–710 CE) periods.

The Gairin B tonal innovation that originated in central Izumo was most likely introduced to the Tōhoku region later than the Gairin A tone system: The distribution of the A and B types in the Tōhoku region suggests that the Gairin A type arrived first, and that the B innovation was introduced from the Sea of Japan coast side later, and spread eastward from there.[46]

Unlike the case of Izumo and Koshi, there is no direct archaeological evidence that the new population in the northern Tōhoku was indeed from Izumo. The linguistic evidence is nevertheless backed up by evidence from genetics and musicology, which both point to a connection between the two regions. The musicologist Kojima Tomiko (1991) argues that the tone scale of folk songs is one of the elements of a song most resistant to change, and therefore potentially very old. She remarks on the fact that the tone scales used in folk songs in the Izumo region of Shimane prefecture stand out against those used in adjacent Yamaguchi and Hiroshima prefectures, but agree with those in Akita, along the Sea of Japan coast in the Tōhoku region. Because of this she suggests there may have been ancient movement of people from Izumo along the Sea of Japan coast to the northeast.

Kojima's conclusions were challenged by Kawase and Tokosumi (2010) who, instead, stress the east-west division in the melodies of Japanese folk songs. Such an east-west split in melodic types, however, does not necessarily negate the validity of Kojima's arguments regarding scales.[47] The split in melodic types may date from a later period, as do the east-west lexical and grammatical isoglosses of modern dialects, which mostly go back to the 14th century.

The geneticist Saitō Naruya compares two Principal Component Analyses (PCAs): in one, he has circled the cluster formed by individuals from the Tōhoku region compared to the average Japanese population (Saitō 2017: 127); in the other, the cluster formed by individuals from Izumo is marked in relation to the population of the Kantō region (2017: 155). He draws attention to the fact that both the Izumo individuals and the Tōhoku individuals cluster to the lower right of the average population, which he calls "the enigma of the relation between the Izumo Japanese and the Tōhoku Japanese populations" (Saitō 2017: 156). A PCA comparison is not a formal test of shared ancestry, and the addition of a comparison with individuals from the Noto peninsula would be especially informative, but the combined agreement in tone systems, segmental

**46.** The Gairin B tonal innovation is most advanced in the northwestern part of central Izumo (Hirako 2017) meaning that it most likely started there and only gradually spread to eastern Izumo. In the Tōhoku region too, our fieldwork has shown that the shifts typical of this system continue to spread.

**47.** David W. Hughes, personal communication.

phonology, music, and DNA, taken together, is not likely to be mere coincidence.[48] At the very least, the fact that Tōhoku DNA differs from that of the Kantō region to its south calls into question the commonly held idea that the northeast was settled by speakers of Japanese overland directly from the Kantō region.

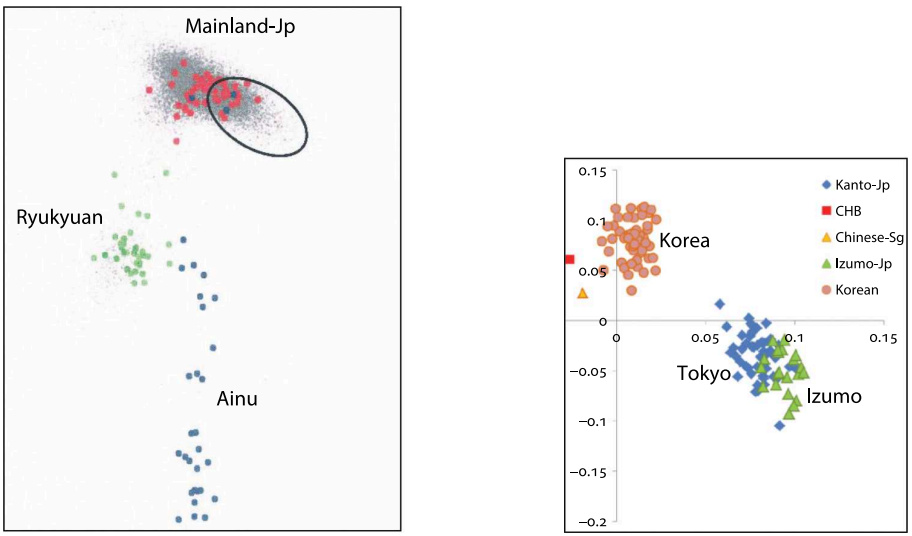


**Figure 11.4** Comparison of PCA with Tōhoku cluster circled (left) and PCA with Izumo cluster in green (right) Adapted from Saitō 2017: 127 & 2–17: 155

## 11.4 Implications for the genealogy of the dialects of Kyūshū

As described in Chapter 3, the tone systems of the southern and western parts of Kyūshū divide the words of the language into two tonal categories, called A and B. The tonal features are not linked to a specific location in the word in these systems. Instead, there are two contrasting melodies (tone contours) that are spread out over entire phrases, i.e., prosodic words including nouns and enclitics. In most dialects, melody A contains a drop in pitch, and melody B ends in a rise. In the dialects of Makurazaki in southwest Kyūshū (McCawley 1978) and Nishi-no-omote on Tanegashima (Arakawa 2015), the realizations of the melodies seem to be almost the opposite of what one hears in other Kagoshima type dialects, but the lexical items associated with each melody are the same. Since the realizations

48. Brown et al. (2014) report a similar congruence in music, genes, and language among the indigenous populations of Taiwan.

in these two dialects (Makurazaki examples in Table 11.2) match those in Gairin dialects of Kyūshū, and since they are both located on small islands, it is likely that they represent the early forms of the melodies, from which the melodies in the majority of Kagoshima dialects changed over time.

Evidence of change in the majority of dialects of the Kagoshima type is not hard to find. We can tell that the transition from Gairin tone patterns to word-melodies must have begun in a fairly small part of southern Kyūshū. The rules that determine the tone of noun compounds in southern dialects, such as Kagoshima proper, cause the whole compound to take the melody of the head (Hirayama 1936). Yet in dialects of northwestern Kyūshū such as Nagasaki (Matsuura 2008, 2014), Shimabara (Matsuura 2005; Katayama 2013), Amakusa Island (Kibe 2012), and Tara in Saga Prefecture (Matsumori 2017), compounds with long heads have melody B even if the head has melody A. The reason appears to be that, in nearby Gairin dialects such as Kitsuki in Ōita Prefecture (Hirako & Igarashi 2014; Hirako 2018), the tonal shape historically associated with MJ /H/-initial compounds was increasingly applied to all compounds – the longer the compound, the stronger the tendency for regularization, and the higher the percentage of compounds that contain /H/ tone. When the transition to a word-melody system reached dialects like Shimabara and Nagasaki, they had absorbed this generalization from Gairin type dialects like Kitsuki: whole compounds with long heads could include /H/ tone even if the head itself had /Ø/ tone, so compounds took word-melody B.

We can say more about the transition from tones to melodies in today's Kagoshima type dialects. It must have proceeded in three steps. At first, southern Kyūshū dialects distinguished three classes of words (A, B, C) corresponding to the three tone patterns in the Gairin tone systems of eastern Kyūshū (Table 11.3). Eventually, classes B and C merged, as seen, for example, in the dialect of Makurazaki. This change, however, did not happen all at once: some words of class C remained distinct while others merged into class B. Traces of this gradual reduction in the size of class C are preserved in dialects that were established in the Ryūkyū islands by Japanese speakers sailing from southern Kyūshū (de Boer 2010: 236, 2017a).

Notably, in the areas between the range of the Gairin tone systems and the new word-melody systems, a toneless zone developed. The broader the toneless zone geographically, the longer the word-tone and melody systems must have coexisted in the area, ultimately resulting in the abandonment of both (see again Figure 1.6).

**Table 11.3** Reconstruction of two stages in the word-melody systems of southern Kyūshū

| **Word melody system (from Gairin)** | | | **Word melody system (Makurazaki)** | | |
|---|---|---|---|---|---|
| A | 2.1, 2.2 | LL-L | A | 2.1, 2.2 | LL-L |
| B | 2.3 | LH-L | B | 2.3, 2.4, 2.5 | LH-L |
| C | 2.4, 2.5 | HL-L | | | |
| A | 3.1, 3.2 | LLL-L | A | 3.1, 3.2 | LLL-L |
| B | 3.4, 3.5 | LLH-L | B | 3.4, 3.5, 3.6, 3.7 | LHL-L |
| C | 3.6, 3.7 | LHL-L | | | |