

# On the interpretation of Middle Japanese tone notations

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**Using Tonal Data to Recover Japanese Language History**

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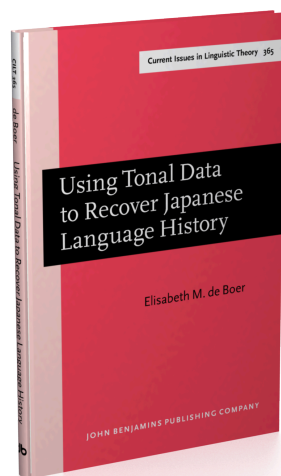
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## On the interpretation of Middle Japanese tone notations

### 4.1 Synopsis of the standard Japanese theory (*teisetsu*)

Ever since the 1930s, linguists have been busy documenting and studying the tone systems of the Japanese dialects. Comparing these with older sources on the tones, they have tried to reconstruct the tone system of proto-Japanese and the history of the tonal changes. The earliest attempts at the reconstruction of the proto-system were by Hattori (1937, 1951), who was the first to suggest that the Tōkyō type tone systems had developed from the Kyōto type. From the start, Hattori worked with the assumption that the tone dot for the Late Middle Chinese RISING tone had been used to mark [H] pitch in Middle Japanese and that the tone dot for the LMC EVEN tone had been used to mark [L] pitch. This interpretation made the MJ words resemble surface forms in modern Kyōto type dialects, which seemed plausible as most of the tone dot materials originated in the Kyōto area. Kindaichi later argued explicitly for the values Hattori had assumed for the rising and even tones, based on a study of old Buddhist tone descriptions, and he added a reconstruction of the value of the GOING tone as /R/, and of the LIGHT EVEN tone as /F/ (Kindaichi 1951).

The Hattori-Kindaichi approach is still common in Japan but is by no means the only one possible. In fact, S. Robert Ramsey proposed a simpler alternative (1979). I have extensively explained the reasons for adopting his approach (de Boer 2010 and de Boer 2024), and therefore focus here on just two sources of material supporting Ramsey's theory: descriptions of the realization of tones contemporary with the production of the tone dot material; and musical notation systems with an uninterrupted lineage starting in the Middle Japanese period.

### 4.2 Buddhist tone descriptions

It is usually assumed that the old tone descriptions, such as those studied by Kindaichi, are unequivocal in indicating Japanese [H] as the value for the LMC rising tone, and Japanese [L] for the LMC even tone. This is certainly the way in which these tones were viewed in Shingon Buddhist circles from the 17th century onward, as is clear from tone descriptions written in that period. But this view is a

late development. The tone descriptions contemporary with the production of the MJ tone dot material are very different, and what they describe are not the tones of Middle Japanese but, rather, the tones of an idealized Chinese as imagined by Japanese of the time, which were then applied to Japanese *faute de mieux*.

In Shingon Buddhist tone theories dating from the 17th century, the even tone is described as *hikusi* ‘low’ and the rising tone is described as *takasi* ‘high.’ The interpretation of the musical notation system in use during that period is clear too. The Buddhist chanting traditions, however, all went through a period of collapse in the 15th century, only to be revived in the 17th century.<sup>16</sup> As the 17th century theories and practices do not go back in an uninterrupted line to the period contemporary with the tone dot annotations, they cannot be used as evidence for the value of the tones in that period.

The detailed agreement between the modern standard view and the ideas of the Edo period Buddhist scholars stems from the fact that both schools of thought had the same starting assumption: the tone system reflected in the old tone dot materials must have resembled the phonetics of Kyōto speech following the left shift discussed in Chapter 3. This assumption inevitably led those studying the problem to the interpretation of the tone dots as now enshrined in the standard theory (*teisetsu*). Whether one lived in the 17th or in the 20th century made no difference.

Buddhist scholars from the esoteric Shingon and Tendai schools had a strong interest in the Chinese tones, as they aimed at a correct pronunciation of the Sanskrit *mantra* and *dhāraṇī*, which had been transcribed by means of Chinese characters. They inferred the correct value of the Chinese tones from the revered 9th century description by of the monk Annen, but Annen’s text, which quotes a number of earlier teachers who had been in contact with spoken Chinese, is notoriously ambiguous and left a lot of room for different interpretations (de Boer 2010: 371–391).

Annen had described the even tone with the Chinese character 低. Nowadays, this character is glossed *hikui* ‘low’, but at the time of the production of the tone dot material, it was glossed *taru* ‘to droop.’ This is, for instance, the reading of this character in the *Ruiju myōgi-shō* dictionary. A gloss *hikisi* or *hikusi* ‘low’ is not attested. So too, the rising tone was described by Annen with the character 昂, which, according to *Ruiju myōgi-shō*, was to be glossed *agaru* ‘to go up’: the gloss *takasi* ‘high’ is not attested. The characters 低 and 昂 also occur

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16. There are tone descriptions from the 15th century in which the tones are not even described in terms of tone height, just in terms of differences in length (de Boer 2010: 500–501). It may be added that the collapse of the Ashikaga shogunate in the middle of 15th century, which ushered in a long period of civil war and political chaos (the Sengoku period), came to an end only at the beginning of the 17th century with the establishment of the Tokugawa shogunate (the start of the Edo period).

together in *Ruiju myōgi-shō* as 低昂, for which the gloss *tari-agaru* ‘to fall and rise’ is given. Reading notes added to the characters in the Buddhist tone descriptions confirm that the contemporary readings were verbs, not adjectives (de Boer 2010: 400–440). Apart from the verb *taru*, the verb *sagaru* ‘to go down’ was also used to describe the even tone.

The description of the going tone in Annen’s text was vague (most likely because it was still primarily characterized by breathy voice quality in the Late Middle Chinese at the time), but he noted that it was lengthened, a statement often repeated in the later Buddhist tone descriptions. In 13th century Shingon tone descriptions, such as those by Shinpan and Ryōson (de Boer 2010: 427, 429), the going tone is described with the character 偃, which has the gloss *fusu* ‘to bow down, bend one’s head, stoop’ (and some near-synonyms) in the *Ruiju myōgi-shō* dictionary. As the *Kanchiin-bon*<sup>17</sup> of the *Ruiju myōgi-shō* dictionary, which coincidentally constitutes our richest source of MJ tone dot markings, originated *in the same period and the same school*, these tone descriptions have a direct bearing on how to interpret the value of the tone dots.

The difference between the LMC even tone and the LMC going tone was apparently seen as one of length. The idea that the going tone was long agrees with the fact that it consisted of a sequence of an even tone followed by rising tone on one syllable, as pointed out by Kindaichi (see Chapter 5). Because Kindaichi interpreted the even tone as [L] and the rising tone as [H], he translated *fusu* (‘bending down’) in the Shingon tone descriptions as ‘rising up’ (Kindaichi 1951: 691), as did Mabuchi later, for the same reason (Mabuchi 1962: 437). If, however, the interpretation of a character that unambiguously describes the going tone as ‘bending down’ is accepted as is, it confirms Ramsey’s idea that the even tone mark was used to denote MJ /H/ tone, and that the rising tone mark was used to denote MJ /L/ tone.

The many contour tones in these tone theories and their highly theoretical nature may be surprising, but it has to be kept in mind that the texts do not describe the tone system of Middle Japanese but, rather, an idealized version of Chinese, the syllables of which when properly chanted would reconstitute magical Sanskrit formulae (de Boer 2008: 81–83). This idealized form of Chinese was not based on any knowledge of the spoken language but simply on (mis)interpretations of a text, written centuries earlier, that had attempted to transcribe Sanskrit and had thereafter acquired authoritative status.

It is possible to surmise how these Chinese contour tones would have been used when employed to mark the level tones of Middle Japanese. Phonetically,

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17. Japanese philologists customarily refer to the first manuscript of a work in a particular lineage of manuscripts (i.e., an urtext) as the *X-bon* ‘the X version’ of the work.

the onset of a falling tone naturally sounds relatively high; the onset of a rising tone sounds relatively low. Non-high vowels, for instance, are intrinsically lower in pitch than high vowels, but this difference is hardly ever phonologized. The lower pitch of a vowel preceded by a voiced consonant, on the other hand, frequently is. This is because a voiced consonant induces a rising tone contour on the syllable it begins, which is far more salient in indicating low pitch than a low, level tone itself (Hombert 1977). Ramsey's reversal of Kindaichi's [H] and [L] in the MJ tone dot material makes both phonological and philological sense. As for MJ contour tones, the long falling going tone was naturally used to mark /F/ tone. In most materials, the rising tone dot did double service, marking /L/ tone and the occasional word-final /R/. (In some materials a special light even tone dot was used to mark /R/ tone.)

It's worth adding that, under the standard interpretation, a tone marked rising has two contradictory interpretations: Nouns in tone class 1.2, for instance, which had /F/ tone are almost exclusively marked with a rising tone dot. Although the standard theory excuses itself by saying that class 1.2 nouns followed by a particle may have been realized with [H-L] rather than [F-L], and that nouns in class 2.5 with a particle may have been realized as [LH-L] rather than [LF-L], the fact remains that, according to the standard theory, the /F/ tone in these words *in isolation* is still said to have been realized with [F] pitch.<sup>18</sup> That Ramsey's theory for /F/ tones in Middle Japanese avoids this contradiction further strengthens its credibility.

### 4.3 Musical notation systems that developed from the tone dots

There are two main types of Buddhist musical notation systems, both called *fushi-hakase* 'teachers of melody'. The older type developed as extensions of the tone dots; the more recent, the *goin-hakase* system 'pentatonic teachers,' was devised as a true musical notation system from the start, indicating absolute pitches. (It is this later type that was used in the 17th century Shingon school.)

In the earlier system, a horizontal line was added to the even tone, and a diagonal line was added to the rising tone, which were both written to the left of the character containing the sensitive syllable. The going tone, which went on the right side, was marked in different ways: a hook, a Z-shape, or a diagonal stroke in the direction opposite that of the mark for the rising tone. Later, the strokes were used without the dots. This system, called *goma-fu* 'sesame notation' (as the

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18. See for instance Suzuki Yutaka's overview of the different marking strategies in Akinaga et al. 1998: 580–581.

shape of the marks resembled sesame seeds), was in use in the Shingon school until well into the 14th century for genres in which the recitation stayed close to ordinary speech.

The system was adopted in the notation of court music (*gagaku*) as well, where it was also called *goma-fu*. In banquet songs, for instance, a word like 2.3 *toki* ‘time’ was marked with two horizontal *hakase* marks  $\rightarrow$   $\rightarrow$ , 2.2 *hito* ‘person’ was marked  $\searrow$   $\rightarrow$  and 2.5 *mayu* ‘eyebrow’ was marked  $\rightarrow$   $\searrow$  (Kindaichi 1974).

Musical genres such as *nō* and *heikyoku* also use notation systems that are regarded as offshoots of this Buddhist *fushi-hakase* system. In the musical notation of *nō* music, which developed in the late 14th century, the shapes and names for marks (*goma-ten* ‘sesame dots’) as well as the attendant musical terminology all bear a very close resemblance to the *goma-fu* used in court music and Buddhists recitation. Adopted in *heikyoku*, the notation system was called *sumi-fu* ‘ink notation’.

In Buddhist circles and court music, the older notation system that had developed from the tone dots died out, so the values now given to the marks in standard sources are modern reconstructions. The notation systems of *nō* and *heikyoku*, on the other hand, have survived into the modern period. In *nō* music, the pitch indicated by the horizontal mark  $\rightarrow$  is high and that indicated by the diagonal mark  $\searrow$  is low. A less frequently used third *goma-ten*, a diagonal  $\swarrow$  expresses an extra-high pitch. In *heikyoku* recitation (Akinaga et al. 1998: 45–46), the mark  $\searrow$  again expresses low pitch, and the marks  $\rightarrow$  and  $\swarrow$  both indicate high. For instance, the word 2.4 *kasa* ‘umbrella’, which is [LH] in modern Kyōto, occurs marked both as  $\searrow$   $\swarrow$  and as  $\searrow$   $\rightarrow$ . The word 2.2 *hasi* ‘bridge’, [HL] in modern Kyōto, occurs both as  $\swarrow$   $\searrow$  and as  $\rightarrow$   $\searrow$ . Sequences of high pitch are always indicated by means of the horizontal stroke (e.g.,  $\rightarrow$   $\rightarrow$ ). Only when the horizontal mark  $\rightarrow$  is combined with the forward slash  $\swarrow$  mark can it express low pitch, but such cases are rare. This is an indication that (just as is still the case in *nō*) the original value of the  $\swarrow$  mark was extra-high.

In the standard theory, the horizontal *goma-fu* mark used in the Shingon school, having developed from the even tone dot, is said to represent /L/, while the diagonal *goma-fu* mark, having developed from the tone dot for the rising tone, is linked to /H/. This is the opposite of the value that these marks have in the *nō* and *heikyoku* notation systems, which developed from this same *goma-fu* and have been in continuous use to the present. As such, these systems, I believe, constitute independent evidence that Ramsey’s association of /H/ with the even tone and /L/ for the rising tone is correct. The less frequently used forward slash mark for the extra-high pitch must go back to the mark of the going tone. The falling contour of this tone [HL] is, after all, most likely to have inspired its usage for extra-high pitch (see Chapter 6).