

# The tones of compounds with long codas in the modern dialects

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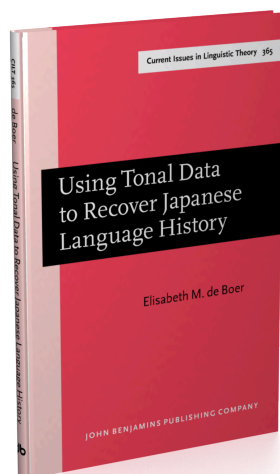
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# The tones of compounds with long codas in the modern dialects

While compounds with short codas could appear in a variety of tonal shapes depending on the tone class of the coda and on the initial tone of the head, the tone patterns of MJ compounds with long codas, as already remarked, were much simpler: the coda attached with either [HLH] tone or [LLH] tone depending on the initial tone of the head. It turns out that this is also what we find in modern dialects, though the pattern has been obscured by post-MJ changes in certain cases.

## 9.1 The tone of 2–3 compounds

Tables 9.1 and 9.2 provide an overview of the tones of compounds in the standard language and a range of other Tōkyō type dialects based my own fieldwork surveys. Spoken data was collected from each of the following 55 representative Tōkyō type dialects:

| Subtype  | ID | Sample designator | Subtype  | ID | Sample designator   |
|----------|----|-------------------|----------|----|---------------------|
| Gairin A | 1  | Taketa 01         | Chūrin   | 29 | Totsukawa-Kazeya 03 |
| Gairin A | 2  | Taketa 02         | Gairin A | 30 | Fukuroi 01          |
| Gairin A | 3  | Taketa 03         | Gairin A | 31 | Fukuroi 02          |
| Chūrin   | 4  | Taketa 04         | Gairin A | 32 | Mori 01             |
| Chūrin   | 5  | Taketa 05         | Gairin A | 33 | Mori 02             |
| Chūrin   | 6  | Taketa 06         | Chūrin   | 34 | Mori 03             |
| Chūrin   | 7  | Taketa 07         | Gairin A | 35 | Mori 04             |
| Gairin A | 8  | Ōita 01           | Chūrin   | 36 | Kakegawa 01         |
| Gairin A | 9  | Ōita 02           | Chūrin   | 37 | Kakegawa 02         |
| Chūrin   | 10 | Kawamoto 01       | Chūrin   | 38 | Kakegawa 03         |
| Gairin A | 11 | Ōda 01            | Chūrin   | 39 | Kakegawa 04         |
| Gairin A | 12 | Ōda 02            | Chūrin   | 40 | Kakegawa 05         |
| Chūrin   | 13 | Ōda 03            | Chūrin   | 41 | Kakegawa 06         |

9.1 (*continued*)

| Subtype  | ID | Sample designator     | Subtype  | ID | Sample designator   |
|----------|----|-----------------------|----------|----|---------------------|
| Gairin B | 14 | Unnan 01              | Chūrin   | 42 | Akiyama-Koakazama J |
| Gairin B | 15 | Unnan 02              | Chūrin   | 43 | Akiyama-Koakazama K |
| Gairin B | 16 | Matsue 01             | Chūrin   | 44 | Akiyama-Koakazama L |
| Gairin B | 17 | Matsue 02             | Chūrin   | 45 | Akiyama-Koakazama M |
| Gairin B | 18 | Mizokuchi 01          | Chūrin   | 46 | Akiyama-Ooakazama N |
| Gairin B | 19 | Mizokuchi 02          | Gairin B | 47 | Tappi A             |
| Gairin A | 20 | Daisen 01             | Gairin B | 48 | Tappi H             |
| Gairin B | 21 | Daisen 02             | Gairin B | 49 | Sai B               |
| Gairin B | 22 | Daisen 03             | Gairin B | 50 | Sai F               |
| Chūrin   | 23 | Totsukawa-Komori 01   | Gairin B | 51 | Sai I               |
| Chūrin   | 24 | Totsukawa-Komori 02   | Gairin A | 52 | Tanohata C          |
| Chūrin   | 25 | Totsukawa-Hiradani 01 | Gairin B | 53 | Tanohata G          |
| Chūrin   | 26 | Totsukawa-Hiradani 02 | Gairin B | 54 | Odanosawa D         |
| Chūrin   | 27 | Totsukawa-Kazeya 01   | Gairin B | 55 | Odanosawa E         |
| Chūrin   | 28 | Totsukawa-Kazeya 02   |          |    |                     |

In this list, sample sites have been ordered geographically: Taketa 01 is the most southwesterly, and each sample thereafter lies north and/or east of the previous one in the list. The columns of the tables have been sorted by subtype and then by ID number; hence, the ID numbers form a monotonic increasing sequence in the Chūrin subtype. In the Gairin A and Gairin B subtypes, there are *two* monotonic sequences corresponding, respectively, to the disjoint areas west and east of Kyōto where these dialects are spoken.

The cells of the table give the number of the *rightmost* mora (1 through 5) that carries an [H] tone; if there is no [H] tone in the compound, the cell contains 0. Blank cells are lacunae, due mostly to an interruption of fieldwork caused by the COVID pandemic. An 'x' means that a voice recording was collected but was of inadequate quality; a '+' indicates the shift of word-final [H] onto the first mora of a following enclitic. To make it easy to see patterns in the data, cells with the same values have been colored alike.

Compounds with /H/-initial heads in MJ (Table 9.1) show reflexes that are almost completely regular in modern Tōkyō type dialects.<sup>34</sup> In fact, the coda is

34. In the standard language (Tōkyō proper), if the coda is itself a 2 + 1 or 2 + 2 mora compound, the location of the /H/ tone is generally maintained.

/HØØ/=[HLL] even in the Kyōto type dialects. The only subtype of Tōkyō type dialects that does not regularly show this [HLL] pattern is Gairin B, whether to the west or east of Kyōto. The reason for this is that MJ /H/ shifted to the right in the Gairin B (but not the Gairin A) subtype depending on height of the vowels in the first morpheme (de Boer & Loukareas 2020). The reflexes that resulted when the head belonged to classes 2.4 and 2.5 have been studied by Hirako (2018): writing ‘I’ for high vowels and ‘A’ for non-high vowels, if the heads are divided into sets I-A, A-A, I-I, and A-I, one sees that the shift began in compounds with heads in set I-A, spread to those in sets A-A and I-I (in that order), and finally, in dialects such as Taisha (northwest of Izumo), affected those in set A-I. As a result, the regular location of the /H/ tone generally falls on the second rather than the first mora of the coda in Taisha. This is clearly an innovation, for in neighboring dialects the location of the /H/ tone (on the first or second mora of the coda) is still conditioned by vowel quality.

The [HLL] pattern in the majority of modern dialects is evident from the overwhelming number of 3s in the Chūrin and Gairin A data for 2–3 compounds. Just as in case of the compounds codas in class 2.2 in Wada’s examples, the shift from [HLH] to [HLL] is no doubt due to the modern rule that, once pitch has fallen, it does not rise again within the same word. Only in the Gairin B data do 4s start to appear more than occasionally. Unexpected values are seen here and there, but the overall trend of the data is undeniable.

Turning to 2–3 compounds with initial MJ /L/ tone (Table 9.2), we expect to find os for the compounds in the Gairin subtypes (both A and B) but 5s in the Chūrin and Nairin subtypes. These predictions are implied by the many MJ manuscripts that mark case and focus particles as [H] after nouns ending in /LH/ (Section 6.2 above). If all attached particles were [H] after 2.2 /LH/ (and 3.2 /LLH/) nouns, then, in compounds, [L] pitch would have spread across the whole compound in Gairin dialects, but only up to the morpheme boundary in dialects of the other Tōkyō subtypes.

The first prediction is confirmed for our sample of Gairin dialects, especially in the Tōhoku region (ID numbers 47 to 55). In north Kyūshū, Shimane, and Shizuoka, half or more of the reflexes in compounds now show [HLL] (3) in the coda, but [LLL] (o) is frequent in compounds in which the coda is a deverbal noun. These data suggest a gradual replacement of older [HLH] by [HLL] in compounds that had had initial MJ /H/, and that this replacement had progressed further in dialects of the Chūrin subtype. This adoption of [HLL] in the coda in the Gairin B dialects of Shimane cannot be recent because both /L/-initial and /H/-initial compounds show a rightward tone shift conditioned by vowel height as previously explained.

Table 9.1 2–3 compounds with MJ initial /H/

| Chūrin     |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|------------|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|            | 4 | 5 | 6 | 7 | 10 | 13 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 34 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |
| akimaturi  |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    |    | 3  |    |    |    |    |    |
| aodatami   |   |   | 3 | 3 | +  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    | 3  |    | 3  |    | 3  |    |    |
| harumaturi |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    | 3  |    |    |    | 3  |    |    |    |    |
| kataguruma |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    |    |    | 3  |    | 3  |    | 3  |
| udezumoo   |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    | 3  |    |    |    | 3  |    |    |    |    |
| yamazakura |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    |    |    | 3  |    |    |    |    |
| asazakura  |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    |    |    | 3  |    |    |    |    |
| asabukuro  |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    | 3  |    | 3  |    | 3  |    |    |
| inabikari  |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 0  |    |    | 3  |    |    | 3  |    |    |    |    |
| kawabukuro |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    |    |    | 3  |    |    |    |    |
| komedawara |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    | 3  |    |    |    | 3  |    |    |    |    |
| matubayasi |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    | 3  |    |    | 3  |    |    |    |    |
| yamaotoko  |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    |    | 3  |    |    |    |    |    |
| dekigokoro |   |   | 3 | 3 | +  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    |    | 3  | 3  |    |    |    |    |
| tuehasira  |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    | 3  |    |    |    |    |    |    |    |
| udemakura  |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    |    | 3  | 3  |    | 3  |    | 3  |
| yumemakura |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    |    |    | 3  |    |    |    |    |
| iromegane  |   |   | 3 | 3 | 3  | 3  |    |    |    |    |    |    |    |    | 3  | 3  |    |    |    |    |    |    |    |    |    |
| aogaeru    |   |   | 3 | 3 | 3  | 3  |    |    |    |    |    |    |    |    | 3  | 3  |    |    | 3  |    | 3  |    |    |    |    |
| harinezumi |   |   | 3 | 3 | 3  | 3  |    |    |    |    |    |    |    |    | 3  | 3  |    | 3  |    |    | 3  |    |    |    |    |
| sirogitune |   |   | 3 | 3 | 3  | 3  |    |    |    |    |    |    |    |    | 3  | 3  |    |    |    |    | 3  |    | 3  |    | 3  |
| sironezumi |   |   | 3 | 3 | 3  | 3  |    |    |    |    |    |    |    |    | 3  | 3  |    |    |    |    | 3  |    | 3  |    | 3  |



Table 9.1 (continued)

| Chūrin     |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|------------|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|            | 4 | 5 | 6 | 7 | 10 | 13 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 34 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |
| monogatari |   |   | 3 | 3 | 3  | 3  |    |    |    |    |    |    |    |    | 3  |    |    |    |    | 3  |    |    |    |    |    |
| yamanobori |   |   | 3 | 3 | 3  | 3  |    |    |    |    |    |    |    |    | 3  |    | 3  |    |    |    |    |    |    |    |    |
| matukazari |   | 3 | 3 | 3 | 3  | 3  |    |    |    |    |    |    |    |    | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    |    |    |
| haruyasumi |   | 3 | 3 | 3 | 3  | 3  |    |    |    |    |    |    |    |    | 3  | 3  | 3  | 4? | 3  | 3  |    |    |    |    |    |
| monooboe   |   | 3 | 3 | 3 | 3  | 3  |    |    |    |    |    |    |    |    | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    |    |    |
| nakanaori  |   | 3 | 3 | 3 | 3  | 3  |    |    |    |    |    |    |    |    | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    |    |    |
| akibiyori  |   | 3 | 3 | 3 | 3  | 3  |    |    |    |    |    |    |    |    | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    |    |    |

Table 9.1 2–3 compounds with MJ initial /H/

|            | Gairin A |   |   |   |   |    |    |    |    |    |    |    |    |    | Gairin B |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|------------|----------|---|---|---|---|----|----|----|----|----|----|----|----|----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|            | 1        | 2 | 3 | 8 | 9 | 11 | 12 | 20 | 30 | 31 | 32 | 33 | 35 | 52 | 14       | 15 | 16 | 17 | 18 | 19 | 21 | 22 | 47 | 48 | 49 | 50 | 51 | 53 | 54 | 55 |
| akimaturi  | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | x        | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4  |    | 4  |    | 4  | 3  |    | 4  |
| aodatami   | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4        | 3  | 0  | 3  | 0  | 3  | 3  | 3  | 0  |    | 4  |    | 0  | 3  | 0  | 0  |
| harumaturi | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4  |    | 4  |    | 4  | 3  |    | 4  |
| kataguruma | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 3  | 3  | 3  | 3  | 3  | 1  | 3  | 0  |    | x  |    | 3  | 3  | x  | 3  |
| udezumoo   | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4        | 3  | 4  | 3  | 3  | 3  | 3  | 3  | 4  |    | 4  |    | 3  | 3  | 3  | 3  |
| yamazakura | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    | 3  |    | 3  | 3  |    | 3  |    |
| asazakura  | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    | 3  |    | 3  | 3  |    | 3  |    |
| asabukuro  | 3        | 3 | 3 | 3 | 3 | 5  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    | 3  |    | 3  | 3  | 3  | 3  |    |
| inabikari  | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 1  | 4        | 2  | 3  | 3  | 3  | 3  | 3  | 3  | 4  |    | 4  |    | 3  | 1  |    | 4  |
| kawabukuro | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4        | 3  | 3  | 3  | 3  | 3  | x  | 3  | 3  |    | 0  |    | 3  | 3  |    | 3  |

Table 9.1 (continued)

|            | Gairin A |   |   |   |   |    |    |    |    |    |    |    |    |    | Gairin B |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|------------|----------|---|---|---|---|----|----|----|----|----|----|----|----|----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|            | 1        | 2 | 3 | 8 | 9 | 11 | 12 | 20 | 30 | 31 | 32 | 33 | 35 | 52 | 14       | 15 | 16 | 17 | 18 | 19 | 21 | 22 | 47 | 48 | 49 | 50 | 51 | 53 | 54 | 55 |
| komedawara | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4        | 4  | 3  | 3  | 3  | 3  | 3  | 3  | 5  |    | 4  |    | 4  | 3  |    | 4  |
| matubayasi | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 3  | 4  | 3  | 3  | 3  | 3  | 3  | 5  |    | 4  |    | 4  | 3  | 4  | 4  |
| yamaotoko  | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 4  | 3  | 5  | 3  | 3  | 3  | 3  | 5  |    | 4  |    | 4  | 3  |    | 4  |
| dekigokoro | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 3  | 3  | 5  | 3  | 3  | 3  | 3  | 4  |    | 3  |    | 3  | 3  |    | 3  |
| tuehasira  | 1        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 5  |    | 3  |    | 3  |    | 3  |    |
| udemakura  | 3        |   | 3 | 3 |   | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 5  |    | 4  |    | 3  | 4  | 3  | 3  |
| yumemakura | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    | 3  |    | 3  | 3  |    | 3  |
| iromegane  | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4  | 4        | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4  |    | 4  |    | 4  | 4  |    | 4  |
| aogaeru    | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 0  | 3  | 0  |    | 0  | 3  |    | 4  |
| harinezumi | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 3  | 4  | 3  | 3  | 3  | 3  | 3  | 4  | 3  | 1  |    | 4  | 3  |    | 4  |
| sirogitune | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 3  | 3  | 3  | 0  | 3  | 3  | 3  | 3  | 3  | 3  |    | 3  | 3  | 3  | 3  |
| sironezumi | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4        | 3  | 4  | 3  | 0  | 3  | 3  | 3  | 4  | 3  | 4  |    | 4  | 3  | 4  | 4  |
| siroosagi  | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4        | 3  | 3  | 3  | 3  | 3  | 3  | 2  | 4  | 3  | 4  |    | 4  | 3  | 4  | 4  |
| mugibatake | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4        | 3  | 4  | 3  | 3  | 3  | 3  | 3  | 4  | 3  | 4  |    | 4  | 3  |    | 4  |
| namatamago | 3        | 4 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4        | 3  | 4  | 3  | 3  | 3  | 3  | 3  | 4  | 3  | 4  |    | 4  | 3  | 4  | 4  |
| yudetamago | 4        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4        | 3  | 4  | 3  | 3  | 3  | 3  | 3  | 4  | 3  | 4  |    | 4  | 3  |    | 4  |
| hanabatake | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 4  | 4  | 3  | 3  | 3  | 3  | 3  | 4  | 3  | 4  |    | 4  | 3  |    | 4  |
| imobatake  | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 4  | 4  | 3  | 3  | 3  | 3  | 3  | 4  | 3  | 4  |    | 4  | 3  | 4  | 4  |
| hebiitigo  | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 5  | 3  | 3  |    | 3  | 3  |    | 3  |
| hurudanuki | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 3  | 4  | 3  | 3  | 3  | 3  | 3  | 5  | 3  | x  |    | 4  | 3  |    | 4  |
| itoguruma  | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  |    | 3  |    | 3  |          | 3  | 3  | 3  |    | 3  | 3  | 3  |    |    | 3  |    | 3  | 3  |    |    |
| kaibasira  | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  |    | 3  |    | 3  |          | 3  | 3  | 3  |    | 3  | 3  | 3  | 4  |    | 3  |    | 3  | 3  |    |    |



Table 9.1 (continued)

|            | Gairin A |   |   |   |   |    |    |    |    |    |    |    |    | Gairin B |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|------------|----------|---|---|---|---|----|----|----|----|----|----|----|----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|            | 1        | 2 | 3 | 8 | 9 | 11 | 12 | 20 | 30 | 31 | 32 | 33 | 35 | 52       | 14 | 15 | 16 | 17 | 18 | 19 | 21 | 22 | 47 | 48 | 49 | 50 | 51 | 53 | 54 | 55 |
| kibidango  | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    | 3        |    | 3  | 3  | 3  |    | 3  | 3  | 3  |    |    | 3  |    | 3  | 3  |    |    |
| kusadango  | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    | 3        |    | 3  | 3  | 3  |    | 2  | 3  | 3  |    |    | 3  |    | 3  | 3  |    |    |
| mugigohan  | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    | 3        |    | 3  | 3  | 3  |    | 3  | 3  | 3  |    |    | 4  |    | 4  | 3  |    |    |
| onigawara  | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 2  | 3  | 2  | 3  |    | 3        |    | 4  | 4  | 4  |    | 3  | 3  | 3  |    |    | 4  |    | 4  | 3  |    |    |
| oomukasi   | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  |    | 3  |          | 4  | 3  | 4  |    |    | 3  | 3  | 3  |    |    | 4  |    | 4  | 3  |    |    |
| simobasira | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    | 3        |    | 3  | 3  | 3  |    | 3  | 3  | 3  |    |    | 3  |    | 3  | 3  |    |    |
| sumidawara | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    | 3        |    | 3  | 4  | 3  |    | 3  | 3  | 3  |    |    | 4  |    | 4  | 3  |    |    |
| takaibiki  | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    | 3        |    | 3  | 4  | 3  |    | 3  | 1  | 3  |    |    | 4  |    | 4  | 3  |    |    |
| inugorosi  | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  |    |    | 3        |    | 4  | 3  | 4  | 3  | 3  | 3  | 3  |    |    | 3  |    | 4  | 3  |    |    |
| udekurabe  | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  |    |    | 3        |    | 4  | 3  | 4  | 3  | 3  | 3  | 3  |    |    | 4  |    | 3  | 3  |    |    |
| koinobori  | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  |    |    | 3        |    | 4  | 3  | 4  | 3  | 3  | 3  | 3  |    |    | 4  |    | 4  | 3  |    |    |
| simanagasi | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  |    |    | 3        |    | 4  | 3  | 4  | 3  | 3  | 3  | 3  |    |    | 4  |    | 4  | 3  |    |    |
| monogatari | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  |    |    | 3        |    | 4  | 3  | 3  | 3  | 3  | 3  | 3  |    | 4  |    | 4  |    | 4  | 3  |    |
| yamanobori | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  |    |    | 3        |    | 4  | 3  | 4  | 3  | 3  | 3  | 3  |    | 4  |    | 4  |    | 4  | 3  |    |
| matukazari | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  |    |    |          |    | 4  | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    |    |    |    |    |    |
| haruyasumi | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  |    |    |          |    | 4  | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    |    |    |    |    |    |
| monooboe   | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  |    |    |          |    | 4  | 3  | 4  | 4  | 3  | 3  | 3  | 3  |    |    |    |    |    |    |    |
| nakanaori  | 3        |   | 3 | 0 | 3 | 3  | 3  | 3  | 3  | 3  | 3  |    |    |          |    | 4  | 3  | 4  | 0  | 3  | 3  | 3  | 3  |    |    |    |    |    |    |    |
| akibiyori  | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  |    |    |          |    | 3  | 3  | 3  |    |    | 3  | 3  | 3  |    |    |    |    |    |    |    |

Table 9.2 2–3 compounds with MJ initial /L/

| Chūrin     |  | 4 | 5 | 6 | 7 | 10 | 13 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 34 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |
|------------|--|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| arasigoto  |  |   |   | 0 | 3 | +  | 3  | 0  | 3  | 3  | 3  | 0  | 3  | 3  | 3  | 3  |    |    |    |    | 3  | 3  |    |    |    |    |
| harisigoto |  |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    | 3  |    |    |    | 3  |    |    |    |    |
| kazaguruma |  |   |   | 3 | 3 | +  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    | 3  |    |    |    |    |    |    |    |    |
| natumaturi |  |   |   | 3 | 3 | +  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    | 3  |    |    | 3  |    | 3  |    |    |
| niwasigoto |  |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    | 3  |    |    |    |    |    |    |    |
| yakizakana |  |   |   | 3 | 3 | 0  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    |    |    | 3  |    |    |    |    |
| yukimaturi |  |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 2  | 3  | 3  |    |    |    |    |    |    |    |    |    |    |
| yaezakura  |  |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    | 3  |    |    | 3  |    | 3  |    |    |
| hudegasira |  |   |   | 3 | 3 | 0  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    |    |    |    |    |    |    |    |
| isiatama   |  |   |   | 3 | 3 | 5  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 0  |    |    |    |    |    | 0  |    |    |    |    |
| kamibukuro |  |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 0  |    |    | 3  |    |    | 3  |    |    |    |    |
| natuyasumi |  |   |   | 3 | 3 | +  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 0  |    |    |    |    |    |    |    |    |    |    |
| takebayasi |  |   |   | 3 | 3 | 3  | 3  | 3? | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    | 3  |    |    | 3  |    |    |    |    |
| mizumakura |  |   |   | 3 | 3 | 5  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    | 3  |    |    | 3  |    |    |    |    |
| hanaabura  |  |   |   | 3 | 3 | +  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    |    | 3  |    |    | 3  |    | 3  |    |    |
| hizamakura |  |   |   | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4  | 0  |    |    |    |    | 3  | 3  |    | 3  |    | 3  |
| gingitune  |  |   |   | 3 | 3 | 3  | 3  |    |    |    |    |    |    |    | 3  | 3  |    |    | 3  |    |    |    |    |    |    |    |
| kizugusuri |  |   |   | 3 | 3 | 3  | 0  |    |    |    |    |    |    |    | 3  | 0  |    |    |    |    | 3  | 4  |    |    |    |    |
| mizugusuri |  |   |   | 3 | 3 | 3  | 3  |    |    |    |    |    |    |    | 3  | 3  |    |    | 3  |    |    | 0  |    |    |    |    |
| hanagusuri |  |   |   | 3 | 3 | 3  | 3  |    |    |    |    |    |    |    | 3  | 3  |    |    | 3  |    |    | 3  |    |    |    |    |
| hasibasira |  |   |   | 3 | 3 | 3  | 3  |    |    |    |    |    |    |    | 3  | 3  |    |    |    |    | 3  |    |    |    |    |    |
| hitodakari |  |   |   | 0 | 3 | 3  | 0  |    |    |    |    |    |    |    | 3  | 0  |    |    |    |    | 3  |    |    |    |    |    |
| hitodanomi |  |   |   | 3 | 3 | 3  | 3  |    |    |    |    |    |    |    | 0  | 0  |    |    |    |    | 0  |    |    |    |    |    |

Table 9.2 (continued)

| Chūrin     |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
|------------|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|
|            | 4 | 5 | 6 | 7 | 10 | 13 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 34 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |  |
| hitodasuke |   |   | 3 | 3 | 5  | 3  |    |    |    |    |    |    |    | 3  | 0  |    |    | 3  |    |    |    |    |    |    |    |  |
| hitogorosi |   |   | 0 | 0 | 5  | 0  |    |    |    |    |    |    |    | 3  | 0  |    |    |    |    | 0  |    |    |    |    |    |  |
| hizagasira |   |   | 3 | 3 |    | 3  |    |    |    |    |    |    |    | 3  | 0  |    | 3  |    |    |    |    |    |    |    |    |  |
| kazetoosi  |   |   | 0 | 0 | +  | 0  |    |    |    |    |    |    |    | 0  | 0  |    |    |    |    |    |    |    |    |    |    |  |
| kutiguruma |   |   | 3 | 3 | +  | 3  |    |    |    |    |    |    |    | 3  | 0  |    | 2  |    |    |    |    |    |    |    |    |  |
| mizuarai   |   |   | 3 | 3 |    | 3  |    |    |    |    |    |    |    | 3  | 3  |    | 3  |    |    |    |    |    |    |    |    |  |
| mizuasobi  |   |   | 3 | 3 | 0  | 3  |    |    |    |    |    |    |    | 3  | 0  |    |    |    |    |    |    |    |    |    |    |  |
| mizubukure |   |   | 3 | 0 | +  | 0  |    |    |    |    |    |    |    | 3  | 0  |    | 0  |    |    |    |    |    |    |    |    |  |
| mizusigoto |   |   | 3 | 3 | +  | 3  |    |    |    |    |    |    |    | 3  | 3  |    |    |    |    |    |    |    |    |    |    |  |
| mizutamari |   |   | 0 | 0 |    | 3  |    |    |    |    |    |    |    | 0  | 0  |    |    |    |    | 3? |    |    |    |    |    |  |
| mitizirusi |   |   | 3 | 3 |    | 3  |    |    |    |    |    |    |    | 3  | 3  |    |    |    |    |    |    |    |    |    |    |  |
| mudazukai  |   |   | 3 | 3 |    | 3  |    |    |    |    |    |    |    | 3  | 3  |    | 3  |    |    |    |    |    |    |    |    |  |
| murahazure |   |   | 3 | 3 |    | 3  |    |    |    |    |    |    |    | 3  | 3  |    |    |    |    |    |    |    |    |    |    |  |
| musikudasi |   |   | 0 | 0 |    | 3  |    |    |    |    |    |    |    | 0  | 0  |    |    |    |    |    | 3  |    |    |    |    |  |
| nakiwakare |   |   | 0 | 0 | 5  | 0  |    |    |    |    |    |    |    | 0  | 0  |    |    |    |    |    |    |    |    |    |    |  |
| takebooki  |   |   | 3 | 3 |    | 3  |    |    |    |    |    |    |    |    | 0  |    |    | 3  |    |    |    |    |    |    |    |  |
| tomokasegi |   |   | 3 | 0 |    | 3  |    |    |    |    |    |    |    | 3  | 0  |    | 0  |    |    |    |    |    |    |    |    |  |
| urenokori  |   |   | 0 | 0 | 2  | 5  |    |    |    |    |    |    |    | 3  | 0  |    |    |    |    |    |    |    |    |    |    |  |
| kazeatari  |   |   | 3 | 0 |    | 3  |    |    |    |    |    |    |    |    | 0  |    | 0  |    |    |    |    |    |    |    |    |  |
| kanemooke  |   |   | 3 | 3 |    | 3  |    |    |    |    |    |    |    |    | 0  |    |    |    |    | 0  |    |    |    |    |    |  |
| kawaasobi  |   |   | 3 | 3 | 0  | 3  |    |    |    |    |    |    |    |    | 3  |    |    | 3  |    |    |    |    |    |    |    |  |
| haetataki  |   |   | 3 | 3 | 5  | 3  |    |    |    |    |    |    |    |    | 0  |    |    |    |    |    |    |    |    |    |    |  |
| marumooke  | 0 | 3 | 3 |   | 5  | 3  |    |    |    |    |    |    |    |    | 0  | 3  | 0  | 3  | 3  |    | 0  |    |    |    |    |  |

Table 9.2 (continued)

| Chūrin     |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
|------------|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|--|
|            | 4 | 5 | 6 | 7 | 10 | 13 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 34 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |  |  |
| huyuyasumi |   | 3 | 3 | 3 | 5  | 3  |    |    |    |    |    |    |    |    | 3  | 0  | 3  | 3  | 3  | 3  |    |    |    |    |    |  |  |
| hiruyasumi |   | 3 | 3 | 3 | 5  | 3  |    |    |    |    |    |    |    |    | 0  | 3  | 3  | 4? | 2  | 3  |    |    |    |    |    |  |  |
| minagorosi |   | 0 | 2 | 5 | 5  | 0  |    |    |    |    |    |    |    |    | 0  | 0  | 0  | 3  | 0  | 5  |    |    |    |    |    |  |  |
| tumeawase  |   | 0 | 2 | 3 | +  | 0  |    |    |    |    |    |    |    |    | 0  | 0  | 0  | 3  | 0  | 0  |    |    |    |    |    |  |  |
| himatubusi |   | 0 | 0 | 0 | 5  | 5  |    |    |    |    |    |    |    |    | 0  | 0  | 0  | 0  | 0  | 0  |    |    |    |    |    |  |  |
| hitodoori  |   | 0 | 2 | 0 |    | 3  | 0  |    |    |    |    |    |    |    | 0  | 0  | 0  | 5  | 0  | 0  |    |    |    |    |    |  |  |
| usugumori  |   | 3 | 0 | 3 |    | 3  | 0  |    |    |    |    |    |    |    | 0  | 0  | 3  | 4  | 3  | 4  |    |    |    |    |    |  |  |
| siniwakare |   | 0 | 3 | 0 | 5  | 1  |    |    |    |    |    |    |    |    | 0  | 0  | 0  | 3  | 0  | 3  |    |    |    |    |    |  |  |
| higeotoko  |   | 3 | 3 | 3 | 3  | 3  |    |    |    |    |    |    |    |    | 3  | 3  | 3  | 3  | 3  | 3  |    |    |    |    |    |  |  |

Table 9.2 2–3 compounds with MJ initial /L/

|            | Gairin A |   |   |   |   |    |    |    |    |    |    |    |    |    | Gairin B |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
|------------|----------|---|---|---|---|----|----|----|----|----|----|----|----|----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|--|--|
|            | 1        | 2 | 3 | 8 | 9 | 11 | 12 | 20 | 30 | 31 | 32 | 33 | 35 | 52 | 14       | 15 | 16 | 17 | 18 | 19 | 21 | 22 | 47 | 48 | 49 | 50 | 51 | 53 | 54 | 55 |  |  |  |
| arasigoto  | 4        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 0  | 3  | 3  | 0  | 3        | 3  | 4  | 3  | 0  | 3  | 3  | 3  | 4  |    | 4  |    | 0  | 3  | 0  | 0  |  |  |  |
| harisigoto | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4        | 3  | 4  | 4  | 3  | 3  | 3  | 3  | 4  |    | 4  |    | 4  | 3  |    | 4  |  |  |  |
| kazaguruma | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 0  | 0  | 3  | 3  | 0  | 0        | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 0  |    | 3  |    | 0  | 3  |    | 0  |  |  |  |
| natumaturi | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 0  |    | 3  | 3  | 3  | 0        | 3  | 4  | 3  | 3  | 0  | 3  | 3  | 0  |    | 3  |    | 0  | 3  | 0  | 0  |  |  |  |
| niwasigoto | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4        | 3  | 4  | 4  | 3  | 3  | 3  | 3  | 2  |    | 4  |    | 0  | 3  |    | 0  |  |  |  |
| yakizakana | 3        |   | 3 |   | 3 | 3  | 3  | 3  | 0  | 3  | 0  | 3  | 0  | 3  | 0        | 0  | 0  | 3  | 3  | 3  | 0  | 3  | 5  |    | 0  |    | 0  | 3  |    | 0  |  |  |  |
| yukimaturi | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4        | 3  | 0  | 3  | 3  | 3  | 3  | 3  | 5  |    | 0  |    | 0  | 3  |    | 0  |  |  |  |
| yaezakura  | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    | 3  |    | 3  | 3  | 0  | 3  |  |  |  |
| hudegasira | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 0  | 3  | 3  | 3  | 3        | 3  | 0  | 3  | 3  | 3  | 3  | 3  | 0  |    | 3  |    | 0  | 3  |    | 3  |  |  |  |

Table 9.2 (continued)

|            | Gairin A |   |   |   |   |    |    |    |    |    |    |    |    |    | Gairin B |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|------------|----------|---|---|---|---|----|----|----|----|----|----|----|----|----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|            | 1        | 2 | 3 | 8 | 9 | 11 | 12 | 20 | 30 | 31 | 32 | 33 | 35 | 52 | 14       | 15 | 16 | 17 | 18 | 19 | 21 | 22 | 47 | 48 | 49 | 50 | 51 | 53 | 54 | 55 |
| isiatama   | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 0  | 0  | 3  | 3  | 0  | 0        | 3  | 0  | 4  | 0  | 3  | 0  | 0  | 0  |    | 4  |    | 3  | 1  |    | 0  |
| kamibukuro | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 4  | 3  | 3  | 0  | 4        | 3  | 0  | 3  | 3  | 3  | 3  | 3  | 5  |    | 4  |    | 0  | 3  |    | 0  |
| natuyasumi | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 0  | 0  | 0  | 3  | 0  | 0  | 4        | 0  | 0  | 0  | 0  | 0  | 0  | 3  | 0  |    | 0  |    | 0  | 3  |    | 0  |
| takebayasi | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3        | 3  | 0  | 3  | 0  | 3  | 0  | 3  | 5  |    | 4  |    | 0  | 3  |    | 3  |
| mizumakura | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 0  | 3  | 3  | 0  | 0  | 4        | 3  | 0  | 3  | 3  | 3  | 3  | 3  | 0  |    | 0  |    | 0  | 3  |    | 0  |
| hanaabura  | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 0  | 3  | 0  | 4  | 3        | 3  | 3  | 3  | 3  | 3  | 0  | 0  | 0  |    | 3  |    | 3  | 3  | 4  | 3  |
| hizamakura | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 0  | 3  | 3  | 4  | 3        | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 0  |    | 0  |    | 0  | 4  | 0  | 0  |
| gingitune  | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4        | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    | 3  | 3  |    | 3  |
| kizugusuri | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 0  | 3  | 3  | 0  | 0        | 3  | 0  | 3  | 5  | 3  | 3  | 3  | 0  | 3  | 0  |    | 0  | 3  |    | 0  |
| mizugusuri | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 0  | 0  | 0  | 3  | 3  | 0  | 0        | 3  | 0  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 4  |    | 3  | 3  | 0  |
| hanagusuri | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 0  | 0        | 3  | 0  | 3  | 0  | 3  | 0  | 3  | 3  | 3  | 0  |    | 0  | 3  |    | 0  |
| hasibasira | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 0  |    | 3  |    | 3  |          | 3  | 0  | 3  |    | 3  | 3  | 3  |    | 0  |    | 0  | 3  |    |    |    |
| hitodakari | 3        |   | 3 | 0 | 3 | 3  | 0  | 3  | 0  | 3  | 0  | 3  |    | 0  |          | 0  | 0  | 0  |    | 0  | 0  | 3  |    | 0  |    | 0  | 3  |    |    |    |
| hitodanomi | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 0  | 3  | 0  | 3  |    | 5  |          | 3  | 3  | 0  |    | 3  | 0  | 3  |    | 4  |    | 0  | 3  |    |    |    |
| hitodasuke | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 0  | 3  |    | 3  |    | 5  |          | 3  | 3  | 3  |    | 0  | 3  | 3  |    | 5  |    | 3  | 3  |    |    |    |
| hitogorosi | 3        | 0 | 3 | 0 | 0 | 3  | 0  | 0  | 0  | 0  | 0  | 0  |    | 0  |          | 0  | 0  | 0  |    | 0  | 0  | 3  |    | 0  |    | 0  | 2  |    |    |    |
| hizagasira | 3        | 3 | 3 | 3 | 3 | 3  | 0  | 3  | 3  | 3  | 0  | 3  |    | 3  |          | 3  | 3  | 3  |    | 3  | 3  | 3  |    | 3  |    | 0  | 3  |    |    |    |
| kazetoosi  | 0        |   | 0 | 0 | 0 | 3  | 0  | 0  | 5  | 0  |    | 0  |    | 0  |          | 0  | 0  | 0  |    | 0  | 0  | 0  |    |    | 3  |    | 0  | 1  |    |    |
| kutiguruma | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 0  | 3  |    | 0  |          | 3  | 3  | 3  |    | 3  | 3  | 3  |    | 0  |    | 0  | 3  |    |    |    |
| mizuarai   | 3        |   | 3 | 2 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  |    | 0  |          | 0  | 0  | 0  |    | 3  | 3  | 3  |    | 0  |    | 0  | 3  |    |    |    |
| mizuasobi  | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 0  | 3  |    | 3  |          | 3  | 0  | 3  |    | 3  | 0  | 3  |    | 0  |    | 0  | 3  |    |    |    |
| mizubukure | 3        |   | 3 | 2 | 0 | 3  | 3  | 3  | 0  | 3  |    | 3  |    | 0  |          | 3  | 0  | 0  |    | 0  | 0  | 3  |    | 0  |    | 0  | 3  |    |    |    |
| mizusigoto | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 0  | 3  |    | 3  |          | 3  | 0  | 4  |    | 3  | 3  | 3  |    | 4  |    | 0  | 3  |    |    |    |

Table 9.2 (continued)

|            | Gairin A |   |   |   |   |    |    |    |    |    |    |    |    | Gairin B |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|------------|----------|---|---|---|---|----|----|----|----|----|----|----|----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|            | 1        | 2 | 3 | 8 | 9 | 11 | 12 | 20 | 30 | 31 | 32 | 33 | 35 | 52       | 14 | 15 | 16 | 17 | 18 | 19 | 21 | 22 | 47 | 48 | 49 | 50 | 51 | 53 | 54 | 55 |
| mizutamari | 3        | 0 | 4 | 0 | 3 | 0  | 0  | 0  | 3  | 0  | 0  | 0  |    | 0        |    |    | 0  | 0  | 0  |    | 0  | 0  | 3  |    |    | 0  |    | 0  | 3  |    |
| mitizirusi |          | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 0  | 3  |    | 3        |    | x  | 4  | 5  |    | 3  | 3  | 3  |    |    | 4  |    | 3  | 3  |    |    |
| mudazukai  | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 0  | 0  | 3  | 3  |    | 0        |    | 3  | 0  | 0  |    | 3  | 3  | 3  |    |    | 0  |    | 0  | 3  |    |    |
| murahazure | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  |    | 3  |    | 0        |    | 3  | 3  | 3  |    | 3  | 3  | 3  |    |    | 3  |    | 0  | 3  |    |    |
| musikudasi | 0        |   | 3 | 0 | 0 | 3  | 3  | 3  | 0  | 0  | 0  | 0  |    | 0        |    |    | 0  | 0  | 0  |    | 0  | 0  | 3  | 0  |    | 0  |    | 0  | 3  |    |
| nakiwakare | 3        |   | 3 | 0 | 3 | 3? | 0  | 0  | 0  | 0  | 0  | 3  |    | 0        |    |    | 0  | 0  | 0  |    | 0  | 0  | 3  |    |    | 0  |    | 0  | 3  |    |
| takebooki  | 3        | 3 | 3 | 2 | 0 | 3  | 3  | 3  | 3  |    | 0  | 0  | 3  |          | 0  |    | 3  | 0  | 3  |    | 0  | 0  | 0  |    |    | 0  |    | 0  | 3  |    |
| tomokasegi | 3        |   | 4 | 0 | 3 | 3  | 0  | 3  | 0  | 3  | 3  | 3  |    | 0        |    |    | 0  | 0  | 5  |    | 3  | 0  | 3  |    |    | 0  |    | 0  | 3  |    |
| urenokori  | 0        | 0 | 5 | 0 | 0 | 3? | 0  | 0  | 0  | 0  | 0  | 0  |    | 0        |    |    | 0  | 0  | 0  |    | 0  | 0  | 5  |    |    | 0  |    | 0  | 3  |    |
| kazeatari  | 3        | 0 | 3 | 0 | 3 | 3  | 0  | 3  | 3  | 3  |    |    |    | 0        |    | 0  | 0  | 0  | 4  |    | 0  | 0  | 0  | 3  |    | 5  |    | 0  | 3  |    |
| kanemooke  | 3        |   | 5 | 3 | 3 | 3  | 3  | 3  | 3  | 3  |    |    |    | 0        |    | 3  | 0  | 0  | 3  | 0  | 0  | 3  | 3  |    |    | 0  |    | 0  | 3  |    |
| kawaasobi  | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  |    |    | 0        |    | 4  | 3  | 4  | 3  | 0  | 3  | 3  | 3  |    |    | 0  |    | 3  | 3  |    |
| haetataki  | 3        | 0 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 0  |    |    |    | 3        |    | 4  | 3  | 0  | 5  | 0  | 3  | 0  | 3  | 0  |    | 5  |    | 0  | 3  |    |
| marumooke  | 0        |   | 0 | 5 | 0 | 3  | 3  | 3  | 0  | 3  |    |    |    |          |    | 0  | 0  | 0  | 3  | 3  | 0  | 3  | 3  |    |    |    |    |    |    |    |
| huyuyasumi | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 0  | 3  |    |    |    |          |    | 4  | 3  | 0  | 3  | 0  | 0  | 3  | 0  |    |    |    |    |    |    |    |
| hiruyasumi | 3        | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  |    |    |    |          |    | 3  | 3  | 0  | 3  | 3  | 3  | 3  | 3  |    |    |    |    |    |    |    |
| minagorosi | 5        | 0 | 3 | 0 | 0 | 0  | 0  | 0  | 3  | 0  |    |    |    |          |    | 4  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |    |    |    |    |    |    |    |
| tumeawase  | 3        |   | 5 | 0 | 0 | 0  | 0  | 0  | 0  | 0  |    |    |    |          |    | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |    |    |    |    |    |    |    |
| himatubusi | 3        |   | 5 | 0 | 0 | 0  | 0  | 0  | 0  | 0  |    |    |    |          |    | 4  | 3  | 0  | 3  | 0  | 3  | 0  | 3  |    |    |    |    |    |    |    |
| hitodoori  | 0        |   | 3 | 0 | 0 | 3? | 0  | 0  | 3  | 3  |    |    |    |          |    |    | 0  | 0  | 0  |    | 5  | 3  | 0  |    |    |    |    |    |    |    |
| usugumori  | 3        | 0 | 5 | 0 | 3 | 0  | 0  | 0  | 0  | 3  |    |    |    |          |    |    | 0  | 0  | 0  |    | 0  | 0  | 0  |    |    |    |    |    |    |    |
| siniwakare | 0        |   | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  |    |    |    |          |    |    | 0  | 0  | 4  |    | 0  | 0  | 3  |    |    |    |    |    |    |    |
| higeotoko  | 3        |   | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  |    |    |    |          |    | 3  | 3  | 3  |    | 3  | 0  | 3  |    |    |    |    |    |    |    |    |

Our second prediction is only partially borne out by the fieldwork data. In the Chūrin type tone systems, word-final /H/ is only seen sporadically (a smattering of 5s). It is, however, found quite frequently in dictionaries of the standard language, most likely because they were compiled more than fifty years before our data collection; a few compounds, especially in the Kawamoto dialect in Tottori, also show the predicted final /H/ tone. In fact, there are indications that not long ago final /H/ in these compounds was far more common. Okuda (1975) lists a number of compounds in the Chūrin type tone system of Hiroshima that (1) have word-final /H/ tone in such compounds or that (2) fluctuate between word-final /H/ and /Ø/, or even (3) between these alternatives and the [HLL] pattern borrowed analogically from compounds that had initial MJ /H/. Using the notation of Table 9.1 and 9.2, cases (1), (2), and (3) correspond to 5, 0, and 3.

Okuda quotes examples of this type in the standard language as well, and remarks that all these compounds have short heads with /Ø/ tone. (These are typically the tone classes that started with /L/ tone in Ramsey's MJ).<sup>35</sup> He also observes that the older an accent dictionary, the more likely it is to show word-final /H/. In modern dictionaries, this /H/ is sometimes not only recorded but also explicitly marked as 'old.' As Okuda mentions, more recent NHK dictionaries show fewer word-final /H/ tone.<sup>36</sup> A comparison of the 1958 and 1998 editions of the NHK *Nihongo hatsuon akusento jiten* shows this historical trend (Table 9.3). All entries indicating /H/ on the last mora (5) are italicized; all other entries indicating no /H/ (0) are boldfaced. The more recent *Shin-meikai* dictionary (2014) still includes many examples of word-final /H/ tone marked 'old.'

Given this documentation, I propose that, in Chūrin tone systems, word-final /H/ in 2–3 compounds with MJ /L/ initials were lost, resulting in atonic compounds (with all /Ø/ tones); thereafter, the coda tones changed to [HLL] by analogy to the pattern that had regularly developed in 2–3 compounds with MJ /H/ initials.<sup>37</sup>

There are not many dialects for which we have substantially older data, but for the Tōkyō dialect proper we do. The older stage with word-final /H/ tone is confirmed by notations in *Nihon daijisho* (Yamada 1892). Many 2–3 compounds that

35. Class 2.2 is an exception: These classes started with /L/ tone in MJ but have word-final /H/ tone in typical Chūrin type tone systems, such as those of Hiroshima and Tōkyō.

36. NHK is Japan's national radio and television broadcaster, and for decades was famous for training its announcers not only to use prescribed accent patterns but also to adopt the same vocal stance. Almost all announcers were male, and listeners could hardly tell one from another by voice alone.

37. Note that nouns of class 3.2 lack /H/ tone in the Chūrin type tone system far more often than nouns in class 2.2.

**Table 9.3** Gradual loss of word-final /H/ tone in the standard language

|       |              | Head class | Coda class | NHK 1958 | NHK 1998 | <i>Shin-meikai</i> 2014 |
|-------|--------------|------------|------------|----------|----------|-------------------------|
| 焼き魚   | yaki-zakana  | A          | 3.1        | 3, 0     | 3        | 3, 0, 5 ( <i>old</i> )  |
| 泣き別れ  | naki-wakare  | A          | B          |          | 0        | 0                       |
| 売れ残り  | ure-nokori   | A          | B          |          | 0        | 0                       |
| 丸儲け   | maru-mooke   | A          | B          | 3, 0, 5  | 3, 0, 5  | 3, 0, 5                 |
| 薄曇り   | usu-gumori   | A          | B          |          | 3, 0     | 0, 3                    |
| 死に別れ  | sini-wakare  | A          | B          |          | 0        | 0                       |
| 釣り道具  | turi-doogu   | A          | 3          | 3, 5     | 3, 5     | 3, 5 ( <i>old</i> )     |
| 焼き豆腐  | yaki-douhu   | A          | 3, 0       | 3, 5     | 3, 5     | 3, 5 ( <i>old</i> )     |
| 本決まり  | hon-gimari   | 0          | A          | 3, 0, 5  | 0, 3     | 3, 0, 5                 |
| 逆戻り   | gyaku-modori | 0          | B          | 3, 0     | 3, 0     | 0, 3                    |
| 食休み   | syoku-yasumi | 0          | B          | 3, 0     | 3        | 3                       |
| 膝頭    | hiza-gasira  | 2.1        | 3.4        | 3, 0, 5  | 3, 0     | 3, 0, 5 ( <i>old</i> )  |
| 風通し   | kaze-toosi   | 2.1        | B          | 0, 5     | 0, 5     | 0, 5                    |
| 口答え   | kuti-gotae   | 2.1        | B'         |          | 3, 0     | 3, 0                    |
| 口車    | kuti-guruma  | 2.1        | 3.1        | 3, 0     | 3, 0     | 3, 0, 5 ( <i>old</i> )  |
| 虫下し   | musi-kudasi  | 2.1        | A          |          | 3, 0     | 3, 0                    |
| 共稼ぎ   | tomo-kasegi  | 2.1        | B          | 3, 0, 5  | 3, 0     | 3, 0, 5 ( <i>old</i> )  |
| 風当たり  | kaze-atari   | 2.1        | A          | 3, 0, 5  | 3, 0     | 0, 3                    |
| 金儲け   | kane-mooke   | 2.1        | B          | 3, 0, 5  | 0, 3     | 3, 0, 5 ( <i>old</i> )  |
| 暇潰し   | hima-tubusi  | 2.1        | A          | 3, 0, 5  | 0, 3     | 3, 0, 5                 |
| かぜ薬   | kaze-gusuri  | 2.1        | 3.7        | 3, 0     | 3        | 3, 0 ( <i>old</i> )     |
| 首くくり  | kubi-kukuri  | 2.1        | A          | 3, 0, 5  | 3, 0     | 0, 5                    |
| 店ざらし  | tana-zarasi  | 2.1        | A          | 3, 0, 5  | 3, 0, 5  | 3, 0, 5                 |
| ハイたたき | hai-tataki   | 2.1        | B          | 3, 5     | 3, 5     | 3, 5                    |
| 二心    | futa-gokoro  | 2.1, ?2.2x | 3.5b       |          | 3        | 3, 0                    |
| 水薬    | mizu-gusuri  | 2.1a       | 3.7        | 3, 5     | 3        | 3, 5 ( <i>old</i> )     |
| 水ぶくれ  | mizu-bukure  | 2.1a       | A          | 3, 0, 5  | 3, 0     | 3, 0, 5                 |
| 水溜り   | mizu-tamari  | 2.1a       | A          | 0        | 0        | 0, 5                    |
| 皆殺し   | mina-gorosi  | 2.2b       | A          | 0, 5     | 0, 5     | 0, 5                    |



Table 9.3 (continued)

|     |             | Head class | Coda class | NHK 1958 | NHK 1998 | <i>Shin-meikai</i> 2014 |
|-----|-------------|------------|------------|----------|----------|-------------------------|
| 人集り | hito-dakari | 2.2a       | A ?        |          | 3, 0     | 3, 0, 5                 |
| 人頼み | hito-danomi | 2.2a       | B          | 3, 0, 5  | 3, 0     | 3, 0, 5                 |
| 人助け | hito-dasuke | 2.2a       | B          | 3, 0, 5  | 3, 0     | 3, 0, 5                 |
| 人殺し | hito-gorosi | 2.2a       | A          | 0, 5     | 0, 5     | 0, 5                    |
| 人通り | hito-doori  | 2.2a       | B          |          | 0        | 0                       |

nowadays end in [LLL] (rare) or [HLL] (the overwhelming majority) still had word-final /H/ tone in Yamada's dictionary. Using the same notation as before, Table 9.4 shows a variety of examples – it is by no means an exhaustive list.

The occasional 3 in Yamada's dictionary shows that the analogical replacement of [LLH] > [LLL] by [HLL] had already started in Tōkyō by the end of the 19th century, probably after it had begun in the Gairin dialects of Shimane.

Thus, the data in Table 9.2 give a somewhat misleading picture: we may safely say that in Chūrin type tone systems like those of Tōkyō, Hiroshima, and Kawamoto, *only the head* determined the location of the /H/ tone in 2–3 compounds until quite recently. The tone of the first mora of the head also determined the tones of compounds in Gairin dialects, but in a different way: because of the tone class mergers, all words ending in MJ /LH/ became atonic (initial /Ø/ realized as [L] and all following /Ø/ as [H]). Both patterns can, however, be explained starting from the same MJ [HLH] and [LLH] coda tone contours.

In the standard reconstruction of the MJ tones, long codas attached with [LHL] tone after /L/-initial heads, and with [HHL] tone after /H/-initial heads. If that had been the case, we would expect /H/ tone on the penult mora in all compounds with long codas. In reality, as we have seen, the long-term trend in all dialects is to put [HLL] on all long codas. To linguists who adhere to the standard reconstruction of the MJ tones, this [HLL] reflex can only be regarded as an innovation – an innovation that occurred in dialects all over Japan. To accommodate this implausible hypothesis, the universality of the Latin accent rule has been proposed as an explanation (Kubozono 2015).<sup>38</sup> But such an appeal to universals is quite unnecessary if one accepts Ramsey's interpretation of the MJ tone marks. The reason that the widely separated Chūrin type tone systems of Hiroshima, Kawamoto, and Tōkyō agree in preserving remnants of two different reflexes, one

38. Latin had short (1-mora) and long (2-mora) vowels. Words of at least two syllables were stressed on the penult unless they contained three or more syllables and the penult vowel was short; in that case, the antepenult was stressed.

**Table 9.4** *Nihon Daijisho* tones of 2–3 MJ compounds with initial /L/

|       |             |      |      |             |   |
|-------|-------------|------|------|-------------|---|
| 床離れ   | toko-banare | 5    | 塗り葉  | nuri-gusuri | 5 |
| 共稼ぎ   | tomo-kasegi | 5    | 濡れ仏  | nure-botoke | 5 |
| 友白髪   | tomo-siraga | 5    | 軒並び  | noki-narabi | 5 |
| 十団子   | too-dango   | 5    | 鼻叩き  | hana-tataki | 5 |
| 泣き笑い  | naki-warai  | 5    | 鼻柱   | hana-basira | 5 |
| 抜け参り  | nuke-mairi  | 5    | 膝頭   | hiza-gasira | 5 |
| 布晒し   | nuno-zarasi | 5    | 人頭   | hito-gasira | 5 |
| 石畳み   | isi-datami  | 5    | 人殺し  | hito-gorosi | 5 |
| 石燈籠   | isi-dooro   | 5    | 人頼み  | hito-danomi | 5 |
| 牛殺し   | usi-korosi  | 5    | 人頼め  | hito-danome | 5 |
| 牛祭り   | usi-maturi  | 5    | 人通り  | hito-doori  | 5 |
| 薄明り   | usu-akari   | 5    | 人頼れ  | hito-nadare | 5 |
| 口車    | kuti-guruma | 5    | 人柱   | hito-basira | 5 |
| 口塞ぎ   | kuti-fusagi | 5    | 人払い  | hito-barai  | 5 |
| 覆り    | kutu-gaeri  | 5    | 人見知り | hito-misiri | 5 |
| 国訛り   | kuni-namari | 5    | 平袴   | hira-bakama | 5 |
| 貸し座敷き | kasi-zasiki | 5    | 二籠もり | huta-gomori | 5 |
| 鉦叩き   | kane-tataki | 5    | 藤袴   | huzi-bakama | 5 |
| 芥子坊主  | kesi-booze  | 5    | 筆頭   | hude-gasira | 5 |
| 腰屏風   | kosi-byoobu | 5, 3 | 道導べ  | miti-sirube | 5 |
| 薦被り   | komo-kaburi | 5    | 水浅葱  | mizu-asagi  | 5 |
| 薦包み   | komo-zutumi | 5    | 水中り  | mizu-atari  | 5 |
| 酒林    | sake-bayasi | 5    | 水驛   | mizu-umaya  | 5 |
| 酒浸し   | saka-bitasi | 5    | 水鏡   | mizu-kagami | 5 |
| 先潜り   | saki-kuguri | 5    | 水葉   | mizu-gusuri | 5 |
| 里開き   | sato-biraki | 5    | 水車   | mizu-guruma | 5 |
| 里巡り   | sato-mawari | 5    | 水溜まり | mizu-tamari | 5 |
| 白搾り   | sira-sibori | 5    | 水調子  | mizu-dyousi | 5 |
| 捨て言葉  | sute-kotoba | 5    | 失火   | mizu-nagare | 5 |
| 袖移し   | sode-utusi  | 5    | 準    | mizu-bakari | 5 |

Table 9.4 (continued)

|     |             |      |      |             |   |
|-----|-------------|------|------|-------------|---|
| 袖搦み | sode-karami | 5    | 水脹れ  | mizu-bukure | 5 |
| 袖括り | sode-gukuri | 5    | 水袋   | mizu-bukuro | 5 |
| 袖捲り | sode-makuri | 5    | 麤    | mina-gorosi | 5 |
| 竹箒  | taka-booki  | 5    | 宮参り  | miya-mairi  | 5 |
| 竹林  | taka-bayasi | 5    | 胸騒ぎ  | muna-sawagi | 5 |
| 簞   | taka-musiro | 5    | 揉み療治 | momu-ryōji  | 5 |
| 竹流し | take-nagasi | 5    | 焼き肴  | yaki-zakana | 5 |
| 棚卸し | tana-orosi  | 5    | 焼き豆腐 | yaki-douhu  | 5 |
| 突き鮑 | tuki-ganna  | 5    | 八頭   | yatu-gasira | 5 |
| 爪調べ | tuma-sirabe | 5    | 藪柑子  | yabu-kouzi  | 5 |
| 爪弾き | tuma-hajiki | 5, 3 | 藪睨み  | yabu-sirami | 5 |
| 褌外れ | tuma-hazure | 5, 3 | 夕涼み  | yu-u-suzumi | 5 |
| 代指  | tuma-barami | 5, 3 | 夕間暮れ | yu-u-magure | 5 |
| 床縛り | toko-sibori | 5    | 訛り   | yoko-namari | 5 |
| 床柱  | toko-basira | 5    | 寄せ柱  | yose-basira | 5 |

with [H] tone on the first mora of long codas and one with [H] tone on the last: these are simply reflexes of the MJ tones of the compounds. Ramsey's theory also makes it easy to see why the [HLL] variant was generalized to all long codas: the alternative pattern ([HLH]), associated with /L/-initial heads, had disappeared from the dialects outside the Kyōto type region. Any similarity between the [HLL] codas that predominate today and the Latin accent rule are purely coincidental. If one wants to find cross-linguistic examples that might help explain the complex tone rules of MJ, one would be better advised to look to African languages with similarly rich tone systems.

It can already be seen in MJ that the longer the compound, the more and/or sooner the tone of the compound was simplified by analogy: if the coda of a compound was long, there were only two tonal possibilities in MJ. In the modern dialects too, the longer the compound, the earlier simplification affected the compound tone rules. A brief comparison of /L/-initial and /H/-initial 3-3 compounds in *Nihon Daijisho* confirms this. These compounds already had [HLL] tone on the coda in the late 19th century (Table 9.5), no longer showing any trace of word-final /H/.

**Table 9.5** The tone of 3–3 compounds in *Nihon Daijisho* (1894)

|      |               | Head class           | Coda class | NHK 1998 |
|------|---------------|----------------------|------------|----------|
| 彼岸桜  | higan-zakura  | [o][2] <sup>39</sup> | 3.2a       | 4        |
| 手押し車 | teosi-guruma  | 1.3a + A             | 3.1        | 4        |
| 田舎言葉 | inaka-kotoba  | 3.1                  | 3.4        | 4        |
| 畳表   | tatami-omote  | 3.1                  | 3.4        | 4        |
| 子供心  | kodomo-gokoro | 3.1                  | 3.5b       | 4        |
| 氷枕   | koori-makura  | 3.1                  | 3.5b       | 4        |
| 田舎育ち | inaka-sodati  | 3.1                  | B          | 4        |
| 昔話   | mukasi-banasi | 3.1                  | B          | 4        |
| 女心   | onna-gokoro   | 3.2b                 | 3.5b       | 4        |
| 女遊び  | onna-asobi    | 3.2b                 | A          | 4        |
| 男心   | otoko-gokoro  | 3.4                  | 3.5b       | 4        |
| 油絵の具 | abura-enogu   | 3.5a/b               | [o]        | 4        |
| 心構え  | kokoro-gamae  | 3.5b                 | B          | 4        |
| 心残り  | kokoro-nokori | 3.5b                 | B          | 4        |
| 畑仕事  | hatake-sigoto | 3.7a/b               | 3.1        | 4        |
| 椿油   | tubaki-abura  | 3.7a/b               | 3.5a/b     | 4        |
| うがい薬 | ugai-gusuri   | A                    | 3.7a       | 4        |
| 隠し言葉 | kakusi-kotoba | B'                   | 3.4        | 4        |

Finally, there is at least one Kyōto type dialect that preserved a distinction between two long-coda tone contours according to the tone of the head. This is the dialect of Suzuka-shi in Mie Prefecture, described by Hirata (2010, 2011). In this dialect, long codas tend to attach with [HLL] after /H/-initial heads but with [LHL] after /L/-initial heads.<sup>40</sup> Hirata links the atypical [LHL] to the MJ pattern in the standard reconstruction, but the two different tonal shapes in the Suzuka dialect cannot, in fact, be explained that way because both MJ [HHL] and [LHL] should have resulted in /H/ tone on the *second* mora. It is unclear why one of the

39. The notation [n] indicates the mora in modern standard Japanese on which the ‘accent’ falls. It is used *faute de mieux* when better tone class data are lacking.

40. Since Hirata gives little information on the words that make up the heads in his compounds, it is hard to know what word-initial tone they had in MJ. In Kyōto type dialects, many tone classes reversed tone between MJ and the modern post-shift Kyōto tone system.

two types of compounds would have followed the so-called Latin accent rule but not the other. The tonal reflexes and the difference between them can, again, be explained readily provided that Ramsey's reconstruction is taken as the starting point (Table 9.6). Just as in Yamada's 19th century Tōkyō dialect, compounds that started /L/ in MJ would have had [LLH] codas before left shift took hold in the Kyōto type tone systems. Compounds that started with /H/ tone would have had ([HLH] >) [HLL] codas before this left shift. In compounds of the first kind, the word-final /H/ tone shifted one syllable to the left; in compounds of the second kind, the left shift was blocked by the boundary between the head and coda. As noted earlier, as far back as MJ, this boundary prevented a tone that belonged to the coda from shifting onto the head.

**Table 9.6** The process that generated Suzuka compound tone

| MJ tone |   | Suzuka tone | Process   |
|---------|---|-------------|---|
| L + LLH | > | L + LHL     | leftward shift of H tone                              |
| H + HLL | = | H + HLL     | leftward shift of H tone blocked by morpheme boundary |