# Shibata and Imada : Correlations Between Segments and Accent in Surnames

# *Shibata* and *Imada*
## Correlations Between Segments and Accent in Surnames

SUGITŌ Miyoko

Using a telephone directory, I extracted surnames consisting of two moras followed by *ta* or *da* meaning 'paddy field'. For Osaka and for Tokyo, I looked at the relationship between segmental makeup and accent, at the relationship between segmental makeup and *rendaku* (also known as 'sequential voicing'), at accent variability, and at the connection between accent and the number of households with a given surname. While the Tokyo and Osaka accent systems are very different, the results showed clearly that accent patterns and the presence or absence of *rendaku* were both influenced by the consonant in the second mora of such a surname. Also, there was a relationship between accent and the vowels. Accent plays a bigger role in Osaka than in Tokyo, but I conjecture that when accent is less important, as in Tokyo, consonants need to be pronounced more clearly.

## 1. Introduction

Once, when I was waiting my turn for a test at a clinic, I heard *Sugifuji*. I thought I was being called, so I stood up.  My surname is actually *Sugitō*, but it is written 杉藤, and since people hardly ever read the second *kanji* correctly (it could represent either *fuji* or *tō*), I am willing to answer to *Sugifuji* instead. Readers with other troublesome surnames have no doubt had the same kind of experience. In this case, however, I was not the person being called. Instead, a man accepted his chit and stepped into the consultation room. The following week, when I was called, the same man quickly rose to his feet. His name was *Tsujiuchi*, and that brought a wry smile to my face, because [tsudʒiutʃi] and [sugiɸudʒi] fit the conditions for mishearing perfectly.

One time in a classroom I asked a student named *Imada* for something, but the person who came forward was named *Shibata*. I tried writing the two names as *īmada* and *s̄ibata* (with the overlining indicating high pitch), and I realized that they actually sound very similar, despite looking so different when written in *kanji* (今田 vs. 柴田). They both have the same vowels in the same order, and the second consonants and third consonants match in place of articulation. Furthermore, I speak the Tokyo dialect, and I pronounce these two names with the same accent pattern. After this incident, I started paying attention to real-life instances of mishearing.

We ordinarily think that we tell words apart by listening to each segment and to the accent pattern. In fact, however, we often depend on the context, which makes it hard to gauge how often words are misheard. In the case of surnames, of course, they can occur in the same context, and mishearing results in reference to a different person. Consequently, surnames are

convenient for examining the perceptual discrimination of words. In addition, since the Tokyo and Osaka accent systems are very different, it seemed that using data from both dialects would shed light on how segments and accent patterns influence each other. This is why I decided to investigate the differences between Tokyo and Osaka accent patterns in surnames, as well as the relationships between segmental makeup and accent pattern.

## 2. What Kind of Surnames are Misheard?

So, just how common is it to mishear a surname? My first step in investigating this question was administering a questionnaire to about 500 junior- and senior-high-school students (five classes at each level). I asked each participant to report instances in which their own surname was misheard as someone else's or when such a mishearing had caused a problem for them. There were 40 students who responded that their easily confusable surname was currently causing trouble or was sometimes misheard. Another 13 students reported past experiences of inconvenience when their surname was misheard.

Among these 53 responses, some involved trouble caused by unusual *kanji*, as in *Kudo* 久渡 and *Muro* 室. Most of the responses, however, involved pairs of names written with the same last *kanji*, as in *Arimoto* 有本 and *Harimoto* 播本, *Morimoto* 森本 and *Horimoto* 堀本, *Matsubara* 松原 and *Natsuhara* 夏原, *Fujii* 藤井 and *Fushii* 伏井, *Satō* 佐藤 and *Katō* 加藤, etc. Those at the top of the list for errors were *Hamada* 浜田 and *Kamada* 鎌田, *Matsuda* 松田 and *Masuda* 増田, *Nishida* 西田 and *Hishida* 菱田, *Sugita* 杉田 and *Sumida* 隅田, *Fuchida* 淵田 and *Fushida* 伏田, etc., that is, three-mora names ending in *ta* or *da* written 田.

In each of these pairs near the top of the confusability list, the two names share the same combination of vowels and the same accent pattern. My conjecture was that the pronunciation of the last mora as *ta* or *da* was not relevant in discriminating between the two possibilities. I therefore narrowed my focus to three-mora surnames ending in *ta* or *da* written 田 and investigated as many as I could find with respect to the following four points, both in Tokyo dialect and in Osaka dialect.

1. possible accent patterns and which names have which pattern
2. the relationship between the frequency of a name and its accent pattern
3. what determines the choice between *ta* and *da*
4. the relationship of segmental makeup to accent pattern and to the choice of *ta* or *da*

## 3. Categories of Three-Mora Surnames Ending in *ta~da* and Their Accent Patterns

First, using the 1959 Osaka telephone directory, I found all the three-mora surnames ending in *ta* or *da* written 田 and counted the number of households listed for each name. There were 532 relevant surnames, but in many cases, two or more names written with different *kanji* have the same pronunciation (e.g., *Asada* written 浅田, 朝田, 麻田, or 阿佐田). Treating groups like these as a single name, the number of distinct surnames was 362. I determined the pronunciation of each name in each dialect (Tokyo and Osaka) by listening to the pronunciation of one middle-aged woman and two college students from each location. Each of these six people was a pure dialect speaker, born and raised in the relevant metropolis

with a mother who was also born and raised there. For each pronunciation, I recorded the accent pattern and whether the final mora was *ta* or *da*. I describe the results below.

### 3.1. The Osaka Accent System

[1] For three-mora surnames ending in *ta* or *da* written 田, the most common accent pattern is LHL (where L indicates low pitch and H indicates high pitch on a mora).

Table 1.  Three-Mora Surnames Ending in *ta* or *da* Written 田: Accent Pattern and
Pronunciation of Final Mora

| ① Osaka Accent Pattern / *ta* or *da* | (1) LHL | (2) LLH | (3) HHH | (4) LHL LLH | (5) LHL HHH | (6) LLH HHH | (7) LLH HHH LHL | Totals |
|---|---|---|---|---|---|---|---|---|
| *ta* | 84 | 2 | 9 | 3 | 24 | 0 | 0 | 122 |
| *da* | 139 | 10 | 25 | 13 | 28 | 5 | 4 | 224 |
| *ta~da* | 14 | 0 | 0 | 2 | 0 | 0 | 0 | 16 |
| Totals | 237 | 12 | 34 | 18 | 52 | 5 | 4 | 362 |
| ② Tokyo Accent Pattern / *ta* or *da* | (1) HLL | (2) LHH | (3) HLL LHH | | | | | |
| *ta* | 94 | 13 | 10 | | | | | 117 |
| *da* | 64 | 95 | 56 | | | | | 215 |
| *ta~da* | 8 | 0 | 22 | | | | | 30 |
| Totals | 166 | 108 | 88 | | | | | 362 |

As ①(1) in Table 1 shows, of the 237 surnames that consistently show the LHL accent pattern in Osaka, 84 consistently end with *ta*, as in *Akita* and *Arita*, 139 consistently end with *da*, as in *Amada* and *Onoda*, and 14 allow either *ta* or *da*, as in *Kamata~Kamada*. In addition, among those that vary between LHL and LLH or between LHL and HHH (shown in ①(4) and ①(5) in Table 1), LHL is more frequent. If we add these 70 names, the total for the LHL accent pattern is 307. It thus appears that, in Osaka, LHL is the core pattern, while the other accent patterns are exceptional.

[2] Among the surnames with the LLH accent pattern, *Shibata* and *Murata* are pronounced with *ta*, whereas all the rest are pronounced with *da*, as in *Yamada* and *Ueda*. When one of these names is followed by a grammatical particle or a suffix (using the nominative particle *ga* and the respectful suffix *san* 'Mr./Ms.' to illustrate here), the high pitch shifts onto the final mora of the combination, as in *Shibata* (LLH) 柴田, *Shibata-ga* (LLL-H) 柴田が, *Shibata-san* (LLL-LH) 柴田さん, and *Shibata-san-ga* (LLL-LL-H) 柴田さんが. Consequently, in the Osaka dialect, it is very unlikely that a listener will confuse *Imada-san* (LHL-LL) with *Shibata-san* (LLL-LH).

The initial two moras in surnames with the LLH pattern (like *Shibata*) tend to carry the HL pattern as words on their own. For example, *yama* 山 'mountain', *ike* 池 'pond', *ishi* 石 'stone', *shima* 島 'island', and *oku* 奥 'interior' are all HL, while *Yamada* 山田, *Ikeda* 池田,

*Ishida* 石田, *Shimada* 島田, and *Okuda* 奥田 are all LLH. Another characteristic of surnames with the LLH pattern is that most of them are very common. Listed with the number of households in the telephone directory shown in parentheses, the eleven most common are *Yoshida* (2225), *Yamada* (2000), *Ueda* (1607), *Maeda* (1220), *Ikeda* (1193), *Ishida* (748), *Okuda* (678), *Shibata* (527), *Shimada* (500), *Sawada* (408), and *Murata* (407). There are more than 400 households with each of these names. Thus, while only a few of the surnames under discussion in this paper carry the LLH accent pattern in Osaka, we can infer from the total number of households that, among people with three-mora surnames ending in *ta* or *da*, more have a name carrying the LLH pattern than have a name carrying any other pattern.

[3] Relevant surnames that consistently show the HHH accent pattern are more numerous than those that consistently show the LLH pattern, but the number is still small. Nine consistently end with *ta* (e.g., *Fujita*), and 25 consistently end with (e.g., *Okada*), for a total of 34.

Many of the surnames with the HHH accent pattern share a segmental characteristic. Of the surnames in which the first two moras form a long syllable, almost all carry this pattern. In some cases, *ta* or *da* is preceded by a long vowel or diphthong, as in *Iida* (pronounced [iːda]), *Eida*, *Kōda*, *Gōda*, and *Saida*. In other cases, the second mora is the moraic nasal, as in *Honda* and *Monda*, or the moraic obstruent, as in *Nitta* and *Hotta*. The number of households with each of these surnames is small, the most common being *Iida*, with 366 households.

Among relevant HHH surnames that do not begin with a long syllable, the first two moras are usually unaccented as words on their own. The surnames in this group with more than 400 households are *Okada* (1194), *Fujita* (1046), *Morita* (597) and *Takeda* (486). Like surnames with the LLH accent pattern, the number of surnames with the HHH pattern is small, but some of them are listed for a relatively large number of households in the telephone directory.

If the portion preceding *ta* or *da* is HL as a word on its own, the surname is likely to have the LLH pattern, as noted above, and if it is HH as a word on its own, the surname is likely to have the HHH pattern. When it comes to surnames that are LHL (the accent pattern carried by more relevant surnames than any other), the portion preceding *ta* or *da* can have any pattern other than HL as a word on its own. Thus, we cannot simply say that the accent pattern on a three-mora surname ending in *ta* or *da* is determined by the accent pattern of the first two moras as an independent word. Also, when those two moras form a long syllable, the surname is likely to be HHH, which suggests some kind of connection between accent pattern and segmental makeup.

In the next section, I report the results of investigating three-mora surnames ending in *ta* or *da* written 田 in connection with the Tokyo accent system, using the same method as in this section.

### 3.2. The Tokyo Accent System

In the Tokyo dialect, HLL is the most common accent pattern for three-mora surnames ending in *ta* or *da* written 田. As ② in Table 1 shows, among the surnames that allow only this accent pattern, 94 consistently end with *ta*, as in *Akita* and *Arita*, 64 consistently end with *da*, as in *Amada* and *Onoda*, and 8 allow either *ta* or *da*, for a total of 166. There are fewer relevant surnames that allow only the LHH (unaccented) pattern, 13 ending consistently with *ta* (e.g., *Murata*) and 95 ending consistently with *da* (e.g., *Asada*), for a total of 108. There are

also 88 relevant surnames that allow either the HLL pattern or the LHH pattern. There is a recent trend in the Tokyo dialect for accented words to become unaccented, and if we treat the variable surnames as unaccented and group them together with the invariably unaccented surnames, the unaccented (LHH) group is larger than the accented (HLL) group.

Many of the surnames with the unaccented (LHH) pattern in Tokyo are listed for a large number of households in the telephone directory. In this respect, LHH surnames in the Tokyo dialect are like LLH surnames in the Osaka dialect.

There are 70 relevant surnames that begin with a vowel, and if we consider only those with 100 or more households listed in the Osaka telephone directory, the ranking is *Ueda* (1607), *Ikeda* (1193), *Ōta* (758), *Ishida* (748), *Okuda* (678), *Iida* (418), *Asada* (374), *Umeda* (380), *Uchida* (358), *\*Iwata* (345), *†Akita* (151), *†Ikuta* (106), *\*Inada* (102), and *Ashida* (100). Of the 14 surnames on this list, the two marked with a dagger allow only the accented (HLL) pattern, and the two marked with an asterisk are variable (LHH~HLL). The top nine allow only the unaccented (LHH) pattern, which shows that many of the relevant unaccented surnames are very common.

Looking at the list in §3.1 of the eleven most common surnames that carry the LLH accent pattern in the Osaka dialect (*Yoshida*, *Yamada*, *Ueda*, *Maeda*, *Ikeda*, *Ishida*, *Okuda*, *Shibata*, *Shimada*, *Sawada*, *Murata*), all except *Shibata* are unaccented (LHH) in the Tokyo dialect, and *Shibata* seems to be shifting from accented to unaccented.

In contrast, among the relevant vowel-initial surnames with five or fewer households listed in the telephone directory, eight are invariably accented (HLL), six are variable, and only one (*Ikada*) is invariably unaccented (LHH). The only relevant surname with over a thousand households listed in the telephone directory that is invariably accented is *Fujita* (1046 households). It thus appears that even though the number of different surnames that are unaccented is smaller than the number that are accented, more than 20 times as many households have an unaccented surname as have an accented surname.

It follows that, in the Tokyo dialect, three-mora surnames ending in *ta* or *da* written 田 can be divided into two groups with respect to accent pattern, namely, an ordinary group and a special group. We might say that those that are unaccented are well-established compound words, whereas those that are accented are somewhat special and have a conspicuous-sounding pronunciation.

### 3.3. A Comparison of Osaka Accent and Tokyo Accent

In the Osaka dialect, 237 relevant surnames have the LHL accent pattern, which is more than for any other pattern. Only a few surnames have the LLH pattern or the HHH pattern. In the Tokyo dialect, 166 relevant surnames allow only the accented (HLL) pattern, and a somewhat smaller number allow only the unaccented (LHH) pattern, but quite a few (88) are variable. These variable surnames can be taken as instances of a tendency for accented words to become unaccented. Of the 237 surnames that are LHL in Osaka, 112 allow only the accented (HLL) pattern in Tokyo, and another 59 are variable, for a total of 171 that can or must be HLL in Tokyo. It thus appears that the Osaka LHL pattern corresponds to the Tokyo HLL pattern. In each case, the number of different surnames that have the accent pattern is large, but the number of households that have each name is small, and many of the surnames that have the pattern are seldom encountered.

In contrast, a relatively small number of different surnames have the LLH pattern or the HHH pattern in Osaka and the LHH pattern in Tokyo, but a large number of households have such names.

There is no relevant surname that allows only the LLH pattern in Osaka and only the HLL pattern in Tokyo. When Osaka LLH does correspond to Tokyo HLL, the pattern varies in one dialect or the other. For example, Osaka *Shibata* (LLH) corresponds to Tokyo *Shibata* (HLL~LHH), and Osaka *Kawata* (LLH~LHL) corresponds to Tokyo *Kawata* (HLL) or *Kawada* (HLL).

# 4. The Relationship Between Segments and Accent Patterns

## 4.1. Segmental Makeup and the Choice Between *ta* and *da*

In a surname of the type under discussion in this paper, what determines whether the final mora is pronounced *ta* or *da*? To investigate this question, I categorized the surnames according to the segments in the immediately preceding mora. I omitted all the surnames that allow either *ta* or *da* and considered only those that consistently have one or the other. The factors involved are as follows.

(1) Consonants
    ① Surnames with *ta*
       (i)   The immediately preceding mora is the moraic obstruent.
          *Nitta*, *Hotta*, *Satta*, etc.
       (ii)  The consonant in the immediately preceding mora is a voiced obstruent ([b], [d], [dz], [g], etc.) or the semivowel [j].
          *Idota*, *Shibata*, *Kagota*, *Izuta*, *Hayata*, etc.
    ② Surnames with *da*
       (i)   The immediately preceding mora is the second half of a long vowel or the second vowel in a vowel-vowel sequence.
          *Iida*, *Gōda*, *Saida*, etc.
       (ii)  The immediately preceding mora is the moraic nasal.
          *Honda*, *Kanda*, *Sanda*, etc.
       (iii) The consonant in the immediately preceding mora is voiceless ([t], [s], etc.) or a non-moraic nasal ([m], [n]).
          *Katada*, *Asada*, *Hanada*, *Hamada*, etc.

A vowel in the penultimate mora has no effect by itself on the choice of *ta* or *da*, but for certain CV combinations, the height of the vowel is relevant.

(2) CV combinations
    ① Surnames with *ta*
       [ki]: *Akita*, *Takita*  [tsu]: *Katsuta*  [ri]: *Harita*  [mi]: *Tomita*
    ② Surnames with *da*
       [ka]: *Akada*  [ta]: *Katada*  [ra]: *Harada*  [ma]: *Tamada*

To sum up, the segments in the immediately preceding mora do influence the choice between *ta* and *da*.

### 4.2. Accent Pattern and the Choice Between *ta* and *da*

There is also a correlation between accent pattern and whether the final mora is *ta* or *da* in surnames of the type under discussion here. In surnames that have the LHL pattern in Osaka and the HLL pattern in Tokyo, *ta* is more likely than *da*. Examples include *Akita*, *Ayata*, *Iwata*, *Ukita*, *Kubota*, *Kurita*, *Shigeta*, *Takita*, *Mugita*, etc. In contrast, we find *da* in almost all the surnames that have the LLH pattern in Osaka and the LHH pattern in Tokyo.

There are 25 relevant surnames that allow only the unaccented (HHH) pattern in Osaka (*Okada*, *Iida*, *Masuda*, *Takeda*, etc.). In Tokyo, 19 of these have the unaccented (LHH) pattern, while only four (*Fujita*, *Morita*, *Kubota*, *Sugata*) have the accented (HLL) pattern. These four are the only ones of the 25 that end in *ta*. Thus, both in Tokyo and in Osaka, relevant surnames tend to be accented if they have *ta* and unaccented if they have *da*. Also, as mentioned above, one surname that allows either *ta* or *da* (*Kawata~Kawada*) is consistently accented (HLL) in Tokyo. Other surnames that behave the same way include *Kamata~Kamada*, *Kumeta~Kumeda*, and *Someta~Someda*, but most surnames that allow either *ta* or *da* also allow either accent pattern in Tokyo. Examples include *Ayata~Ayada*, *Awata~Awada*, and *Iyota~Iyoda*, which are ordinarily accented if they end with *ta* and unaccented if they end with *da*. In Tokyo, we find surnames like *Tokuda* and *Nukada*, with *da*, but in Osaka, these allow either *ta* or *da* and carry the LHL accent pattern regardless of whether they end in *ta* or *da*. In general, there is a strong correlation between accent pattern and the choice of *ta* or *da* in the Tokyo dialect. Thus, whether *ta* or *da* appears is related not only to the segments in the immediately preceding mora but also to the accent pattern. In the following section, I categorize the relevant surnames according to whether they are accented or unaccented in Tokyo and then according to the accent pattern they carry in Osaka. I then investigate how the accent patterns correlate with the consonant in the second mora and with the choice between *ta* and *da*.

### 4.3. Correlations Between Accent Pattern, Preceding Consonant, and the Choice of *ta* or *da*

Table 2 categorizes surnames of the type under discussion (i.e., three-mora surnames ending in *ta* or *da* written 田) on two dimensions. The horizontal dimension is accent pattern, with the Tokyo accent patterns as the primary categories and the corresponding Osaka accent patterns as subcategories. Surnames that are accented (HLL) in Tokyo are on the left under I, those that vary (LHH~HLL) are in the middle under II, and those that are unaccented (LHH) in Tokyo are on the right under III. The subcategories numbered (1)–(17) show all the possible correspondences between Tokyo accent and Osaka accent.

The vertical dimension in Table 2 is segmental makeup of the second mora, that is, the mora that immediately precedes *ta* or *da*. The symbol /H/ means that this mora is the second half of a long vowel or the second vowel in a diphthong. The symbol /N/ means that this mora is the moraic nasal, and the symbol /Q/ means that it is the moraic obstruent. All the other symbols in the same column are phonetic transcriptions of the consonant in a CV second mora.

The figures in Table 2 show the number of surnames in each cell. When there is more than one way to write the first two moras in *kanji* (as in 茂田, 重田, and 繁田 for *Shigeta*), all the possibilities are grouped together and counted as a single surname. Boldface figures are

surnames ending in *da*. As noted above, surnames that allow either *ta* or *da* have been omitted here.

The surnames in columns (1)–(5), under I, are consistently accented (HLL) in Tokyo, and there is at least one example for every type of second mora that contains a consonant.

The surnames in columns (6)–(10), under II, are pronounced either accented (HLL) or unaccented (LHH) in Tokyo, and some examples have a vocalic second mora (i.e., the second half of a long vowel or the second vowel in a diphthong). There are also examples in which the second mora is the moraic nasal /N/. In the examples with a CV second mora, some have a nasal consonant as C, some have a voiceless consonant, and some have [r] or [w]. The only examples with a voiced obstruent as C are *Tsubota* and *Shibata*. Under both I and II, the row for [k] as C (marked with dotted lines in Table 2) is the boundary between examples with *da* and examples with *ta*.

The surnames in columns (11)–(17), under III, are consistently unaccented (LHH) in Tokyo, and in the examples with a CV second mora, C is restricted; some have a voiceless consonant, and some have [r] or [w]. The row for [k] as C (marked with dotted lines in Table 2) is the boundary under III. There are very few surnames under III in which C is one of the consonants below [k], especially if C is a voiced obstruent. Except for *Hirata*, *Murata*, and *Nagata*, the few examples that do exist all end with *da*.

The boundary between surnames ending in *da* and surnames ending in *ta* is a bit lower for III as compared to I and II, but as shown at the right side of Table 2, the choice between *da* and *ta* is almost entirely predictable from the second mora (i.e., the vertical dimension of the table). Accent pattern is also relevant, as shown at the bottom of Table 2. In general, the surnames under I, which are consistently accented (HLL) in Tokyo, are more likely to end with *ta* than are surnames in the rest of the Table 2. For surnames under II, which vary between accented and unaccented in Tokyo, both *ta* and *da* are likely. Surnames under III, which are consistently unaccented (LHH) in Tokyo, almost all end in *da*.

# 5. Conclusion

The results above show that *Shibata* ends in *ta* and *Imada* ends in *da* because of the [b] in *Shibata* and the [m] in *Imada*. In the Tokyo dialect, both of these surnames can be pronounced either accented or unaccented. Nonetheless, *Shibata*, with the voiced obstruent [b] in the second mora, is usually pronounced accented (HLL), whereas *Imada*, with [m] in the second mora, ends in *da* and is likely to be pronounced unaccented (LHH).

When these two surnames carry the same accent pattern, it seems that the only way to distinguish them accurately is to pronounce the consonants clearly. As explained above, there is a correlation between accent pattern and segmental makeup, and there is also a trend in Tokyo toward unaccented pronunciations. Consequently, we can expect that there will be a tendency to pronounce consonants strongly in order to maintain distinctiveness.

In Osaka, on the other hand, *Shibata* is LLH and *Imada* is LHL, which means that these two surnames are clearly distinguished by accent pattern. Besides having three possible accent patterns for three-mora surnames in the Osaka dialect, not many surnames vary by allowing either LLH or LHL. Overall, more than one pattern is possible for fewer surnames in Osaka than in Tokyo.

One other accent pattern that can be observed in Osaka is HLL. Examples that can be pronounced this way include *Shibata* and *Kaneda*, and the reason seems to be the influence of pronunciations that people are used to hearing on television broadcasts of baseball games. There are people who call classmates *Shibata-san* (LLL-LH) and *Kaneda-san* (LHL-LL) but call baseball players *Shibata* (HLL) and *Kaneda* (HLL). Also, *Onoda* is normally LHL, but in the case of the Mr. Onoda who spent many years alone in the jungle after World War II and has frequently been reported on in the news, the HLL pattern is sometimes heard.

People from Tokyo ordinarily pronounce people's names according to the Tokyo accent system, regardless of what they hear from other people. In contrast, people from Osaka tend to pronounce names as the individuals who have those names pronounce their names themselves, including the accent pattern. There are also more than a few cases in which different accent patterns reflect different *kanji*, as in *Fukuda* 富久田 (LHL) vs. *Fukuda* 福田 (LLH) and *Asada* 朝田 (HHH) vs. *Asada* 浅田 (LHL).

Even when the *kanji* are identical, there are many cases in which different people with the same surname are distinguished by different accent patterns; the people themselves use different accent patterns, and other people go along. Accent pattern variability is also different in Osaka than in Tokyo. It sometimes arises in Osaka in order to distinguish different people with the same surname, but this phenomenon is never encountered in Tokyo. In this sense, accent plays a more important role in Osaka than in Tokyo.

This paper has demonstrated that accent patterns correlate with segments and that accent plays a bigger role in Osaka than in Tokyo in distinguishing words. It has also led to the conjecture that when the function of accent weakens, as in the Tokyo dialect, it becomes necessary to pronounce consonants more clearly. Correlations between segments and accent, as well as their phonological role, are topics of great interest.

Table 2. Three-Mora Surnames Ending *ta* or *da*: Accent and Second-Mora Consonant
Figures show the number of surnames in each cell (regular = *ta*, **bold** = *da*)

| | I Accented in Tokyo | | | | | II Variable in Tokyo | | | | | III Unaccented in Tokyo | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) |
| Tokyo | HLL | HLL | HLL | HLL | HLL | LHH HLL | LHH HLL | LHH HLL | LHH HLL | LHH HLL | LHH | LHH | LHH | LHH | LHH | LHH | LHH |
| Osaka | LHL | LLH | HHH | LHL LLH | LHL HHH | LHL | LLH | HHH | LHL LLH | LHL HHH | LLH | LLH HHH | HHH | LHL | LHL LLH | LHL HHH | LHL LLH HHH |
| vowel length /H/ | | | | | | | | | **2** | **4** | **3** | **1** | **14** | **5** | **1** | **3** | **1** |
| moraic nasal /N/ | | | | | 1 *Jinta* | **9** | | | **1** | | | **2** | **8** | | | **4** | **1** |
| [s,ʃ] | **9** | | | | | **9** | | | **1** | | **2** | | **2** | 7 | **2** | **3** | |
| [m] | **22** | | | | 3 | **4** *Imada* | | | **2** | **2** | **2** | | | 1 | | | |
| [n] | **21** | | | | | **9** | | | **1** | | | | | 1 | **2** | **1** | |
| [t] | **5** | | | | **1** | 12 | | | | | | | | 7 | | | 1 |
| [k] | 16 | | | | 3 | 11 | | | | 1 | **2** | | | 4 | 1 | 5 | 1 |
| moraic obstruent /Q/ | | | | | | | | | | | | | 3 | | | | |
| [r] | 15 | | 1 | **1** *Harada* | 6 | 5 | | | | 2 | 1 *Murata* | **1** | | 1 | 1 *Hirata* | | |
| [w] | 2 | | | **1** *Tsuwada* | | 4 | | 1 *Yawata* | | | **1** *Sawada* | | | | | | |
| [j] | 4 | | | | | | | | | | | | | | | | |
| [d] | 1 *Kadota* | | | | | | | | | | | | | | | | |
| [b] | 6 | | 1 *Kubota* | | 1 *Tobita* | | 1 *Shibata* | | | 1 *Tsubota* | | | | | | | |
| [g,ŋ] | 5 | | 1 *Sugata* | | 4 | | | | | | | | | | 1 *Nagata* | | |
| [dz] | 6 | | 1 *Fujita* | | 1 *Tsujita* | | | | | | | | | | | | |
| | *ta* | | | | | *ta* or *da* | | | | | *da* | | | | | | |

Left margin label: Second-Mora Segment — Phonetic transcriptions (in square brackets) indicate the consonant in a CV second mora.

Right margin labels: *da* / *ta* or *da* / *ta*

ORIGINAL PAPER
SUGITŌ Miyoko, 1998, Shibata-san to Imada-san—Goon to Akusento no Kanren—, *Nihongo Onsei no Kenkyu 6 Shibata-san to Imada-san*, Izumi Shoin, pp. 3-15. (Reprinted in a revised form from Shibata-san to Imada-san—Tango no Chōkakuteki Benbetsu ni Tsuiteno Ichikōsatsu—, *Gengo Seikatsu* 165, Chikuma Shobō, pp. 64-72, 1965)
Translated by Timothy J. Vance
Proofed by KUBOZONO Haruo (NINJAL)