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## TEACHING TIP

### A COMMUNICATIVE APPROACH AND DIALECT EXPOSURE ENHANCE PITCH ACCENT AWARENESS BY LEARNERS OF JAPANESE

Vance Schaefer, University of Mississippi

Isabelle Darcy, Indiana University

#### INTRODUCTION

Japanese pronunciation is deceptively simple. Vowels are limited to five, and consonants generally pose little difficulty for L1 English speakers except for a few novel sounds such as /tsu/ or [r]. Thus, the L1 English speaker commonly comes away with the impression that Japanese pronunciation is quite simple. Yet, there are subtle differences such as the /t/ being less aspirated in Japanese than its English counterpart or Japanese featuring /u/ rather than /u/. Additionally, words in Japanese are distinguished by their pitch-accent pattern.

Simply put, each mora (i.e., unit of Japanese rhythm smaller than a syllable) in a word bears either a low (L) or high (H) pitch. Thus, the 2-mora word [ka.ki] (note: a [.] separates each mora) can either mean 'persimmon' or 'hedge' if spoken in the LH pattern or 'oyster' if spoken with the HL one. Nevertheless, such lexical contrasts are again often glossed over in the Japanese as a Foreign Language (JFL)/ Japanese as a Second Language (JSL) classroom, setting learners up for a fall in communicative skills, especially when aggravated by issues in grammar or vocabulary.

One reason why pitch accent is neglected in the classroom may be due to the fact that the functional load of pitch accent to differentiate minimal pairs is considered to be low (14%, Shibata & Shibata, 1990). While most words can be understood through context, the wrong pitch pattern on a word will often not be understood in isolation. In fact, the following tongue twister illustrates that the 'intelligibility load' of pitch accent when interacting with segmentation is indeed quite large. Such a sentence would be very difficult to understand if not spoken with appropriate pitch accents:

[su.mo.mo.mo.mo.mo.mo.mo.mo.mo su.mo.mo.mo.mo.mo.mo.mo.no.u.chi]  
*sumomo momo, momo momo, sumomo momo momo no uchi.*

LHH H LH, LH H LH, LHH H LH H LH H HH

plum also peach, peach also peach, plum also peach also plum of inside

*A plum is also (a type of) peach, a peach is also (a type of) peach, both plums and peaches are in the peach (family).*

While this tongue twister may stretch the limits of the Japanese language, it accentuates the point (pun intended) of the actual functional load of pitch accent in Japanese.

Moreover, the pitch pattern of a word may even be modified when combined with other words (i.e., compounds) or in phrases [adjective + noun, noun (object) + verb], even more so than in a tonal language like Mandarin (cf., tone sandhi, where two adjacent syllables carrying tone 3 would be realized as the sequence tone 2 + tone 3). The following example illustrates these adjustments in compounds. Here, the initial L of 'airport' becomes H in the compound:

[ko.ku.sa.i] LHHH 'international'  
 [ku.u.ko.o] LHHH 'airport'  
 [ko.ku.sa.i.ku.u.ko.o] LHHH HLLL 'international airport'  
 (Tanimori & Sato, 2012, p. 22)

When combining words in noun/adjective phrases, the following example shows that the system is in fact relatively opaque. The word 'car' is pronounced with a different pitch-accent depending on its color:

[a.ka.i] 'red' LHH  
 [ku.ru.ma] 'car' LHH  
 [a.ka.i.ku.ru.ma] 'red car' LHHHHH  
 [a.o.i] 'blue' LHL  
 [ku.ru.ma] 'car' LHH  
 [a.o.i.ku.ru.ma] 'blue car' LHLLHH  
 (cf., Tanaka & Kubozono, 2012, pp. 75-76)

In addition to the 'functional intelligibility load,' pitch accent represents a social aspect where "Differences existing among Japanese dialects can be seen best in the accent of words" (Kindaichi, 1988, p. 56). For example, the pitch accent pattern of 'thank you' varies regionally as in [a.RI.ga.to.o] LHLLL (note: capital letters indicate the accent) in standard Japanese versus [a.ri.ga.TO.o] LLLHL in the Kansai dialect of Osaka and Kyoto (Kubozono, 2012). Indeed, some words often have the opposite pitch patterns in different varieties: in standard Japanese, LH [ha.shi] means 'bridge', and HL [ha.shi] means 'chopsticks'; in Kansai, this pattern is reversed: LH means 'chopsticks' and HL means 'bridge.'

Pitch accent is important at advanced levels for reading and listening to academic discourse and polite language. Pitch accent interacts with pausing to define thought groups, e.g.,

[a.ru.mi.ka.n. no. u.e. ni. a.ru.mi.ka.n]  
 LHHHH H LH H HL HLL  
 aluminum can of top on is located (that) mandarin orange  
*a mandarin orange (that) is located on top of an aluminum can*

Similarly, presentations adopt a more formal, polite manner of speaking, resulting in changes in pitch accent. For example, the polite *o*-NOUN *versus* plain NOUN can differ, e.g.,

[su.shi] LH 'sushi'

[o.su.shi] LHL 'sushi' (polite)

The humble o-VERB STEM versus plain nonpast verb can also differ, e.g.,

[o.ka.ki shi.ma.su] LHH HHL 'I write'

[ka.ku] HL 'I write'

Thus, pitch accent is an important part of vocabulary and grammar, aiding learners in speaking fluency, understanding of expository discourse and cultural proficiency. In short, Japanese pitch accent – generally often overlooked in the classroom – is in fact the cornerstone of effecting greater global abilities in understanding and using the language among JFL students.

The goals of this teaching tip are twofold:

- 1) To provide the teacher with a short primer about Japanese pitch accent, and
- 2) To discuss teaching methods by offering sample lessons to help teachers embed pitch accent practice into lessons.

An ancillary goal is to advocate the teaching of dialectal differences to raise awareness by students of the importance of pitch accent

## WHAT THE TEACHER NEEDS TO KNOW

### Linguistic description of pitch accent in Japanese

*Patterns.* Despite the seeming opacity of the pitch accent system, there are rules or tendencies which can be exploited in the JFL/JSL classroom to aid learners in mastering pitch accent. The accented mora in a word in Japanese bears a high pitch followed by a drop in pitch from high to low. While knowing where the accent occurs is unpredictable, there are tendencies, and once the accent location is known, the pitch of each mora of a word can be easily assigned.

- Every mora in a word bears either a low or high pitch.
- The first mora is low unless the accent falls on that mora making it high.
- The first and second mora of a word must differ in the pitch so that when the first mora is low, the second must be high or vice-versa. The exception is a heavy first syllable, e.g., [ko.u.ko.u] 'high school' where in effect the entire first syllable [kou] can be pronounced high (Tsurutani, 2011).
- All the moras occurring between the first low mora and the accented mora are high in pitch.
- Once the pitch falls from high to low within a word, it cannot rise again.
- Moras following the accented mora are low in pitch (cf., Sugiyama, 2012, p. 6)

However, there are also unaccented words where there is no fall from high to low within the word. In Table 1, we can see the accent pattern types according to the placement or lack of an

accent. Also, some patterns appear more frequently than others (See figures in parentheses in Table 1).

Table 1

*Types and Frequencies of Lexical Pitch Accent Patterns in Standard Japanese*

No. of moras \ Pattern type	1 mora	2 moras	3 moras	4 moras
<i>heibangata</i> 'flat' (=unaccented)	<i>hi.ga</i> LH 'sun/day' (> 30%)	<i>ha.shi.ga</i> LHH 'edge' (approx. 15%)	<i>sa.ka.na.ga</i> LHHH 'fish' (approx. 50%)	<i>ko.ku.ba.n.ga</i> LHHHH 'blackboard' (< 70%) * <i>ko.u.ko.u.ga</i> LHHHH ⇨ HHHHH 'high school' when the first syllable is heavy
<i>atamadakagata</i> 'initial (head)'	<i>hi.ga</i> HL 'fire' (< 70%)	<i>ha.shi.ga</i> HLL 'chopsticks' (approx. 65%)	<i>mi.do.ri.ga</i> HLLL 'green' (< 40%)	<i>chu.u.go.ku.ga</i> HLLLL 'China' (< 10%)
<i>nakadakagata</i> 'medial'			<i>ta.ma.go.ga</i> LHLL 'egg' (< 10%)	<i>hi.ko.o.ki.ga</i> LHLLL 'airplane' (> 10%)
<i>nakadakagata</i> 'medial'				<i>mi.zu.u.mi.ga</i> LHHLL 'lake' (< 10%)
<i>odakagata</i> 'final (tail)'		<i>ha.shi.ga</i> LHL 'bridge' (< 20%)	<i>a.ta.ma.ga</i> LHHL 'head' (approx. 5%)	<i>o.to.o.to.ga</i> LHHHL 'younger brother' (approx. 5%)

\* *ga* is a nominative particle (Based on Tanaka & Kubozono, 2012, pp. 58-59)

*Tendencies.* Tendencies also exist in terms of the frequency of pitch accent patterns as can be seen the chart above, e.g., the unaccented pattern is quite frequent in 3- and 4-mora words (Tanaka & Kubozono, 2012). Also, tendencies for pitch accent patterns exist for word types: most native Japanese words and Sino-Japanese loanwords are unaccented, but when accented, the accent is generally on the antepenultimate mora (see Kawahara, 2015 for details). This tendency is reflected in Western loanwords which also tend to be accented on the antepenultimate mora. Thus, we have words such as [BA.na.na] HLL 'banana' etc., where incidentally the accent does not necessarily coincide with the word stress of English. Exceptions include when the third mora from the end is the second part of a heavy syllable, e.g., [baa], yielding [ha.n.BA.a.ga.a] 'hamburger' and not [ha.n.ba.A.ga.a] (cf., Tanaka & Kubozono, 2012, p. 64).

Tendencies also exist for compound verbs, adjectives and nouns. For compound verbs where the first part is also a verb, the accent falls on the second syllable from the end on all non-past tense forms, e.g., [a.RU.ku] LHL + [tsu.zu.ke.ru] LHHH = [a.ru.ki.tsu.zu.KE.ru] LHHHHHL 'to continue walking' (Tanaka & Kubozono, 2012, p. 83). Patterns exist as well for other forms of compound verbs (e.g., past tense), compound adjectives, and to some extent for compound nouns.

Pitch accent also interfaces with grammar with fairly regular pitch accent placement. In the conjugation of verbs and adjectives, there are two types: accented and unaccented. Accented adjectives are more common than unaccented ones (Tanaka & Kubozono, 2012, p. 75) while accented verbs and unaccented verbs are in roughly equal proportion (p. 80). For accented verbs and adjectives, there is a shift in the place of accent, e.g.,

[ta.BE.ru] LHL nonpast 'to eat'

[TA.be.ta] HLL past 'to eat'

[ta.KA.i] LHL nonpast 'to be high/expensive'

[TA.ka.ka.t.ta] HLLLL past 'to be high/expensive'

We see regular patterns for pitch accent placement in other accented verb forms, e.g., [ta.be.SA.se.ta] (causative), [ta.be.RA.re.ta] (passive), or in both accented and unaccented verbs on the same affix, e.g., [ta.be.MA.su] (polite form) or [ta.be.YO.u] ('let's eat'). As such, with controlled exposure in the JFL/JSL classroom, learners could learn to make educated guesses and/or lexicalize the accent placement with regularity.

### **Importance of pitch accent for communication**

Pitch accent is important in Japanese: it constrains lexical access for native speakers (Otake & Cutler, 1999) and is processed differently in the brain according to dialect (Sato et al., 2013). Non-target-like productions create an impression of a foreign accent – more so for suprasegmentals than segmentals in Japanese (Sato, 1995). Yet, it is rarely taught explicitly in JFL classrooms while learners have difficulties acquiring native-like pitch-accent patterns implicitly (Shport, 2008). L1 English/L2 Japanese learners have difficulty separating the length correlate of English word stress when producing Japanese pitch accent (Kondo, 2007). This is problematic as vowel length is phonemic in Japanese. Anecdotally speaking, L1 English speakers oftentimes either speak with the patterns of English word stress or flat pitch patterns.

Perceptual training improves perception/production of suprasegmentals (Wang, Jongman, & Sereno, 2003) and has been shown to do so specifically for Japanese pitch accent (e.g., listening discrimination, metalinguistic knowledge, Hirano-Cook, 2011). Improved perceptual/listening abilities result in enhanced production/speaking (Rvachew, Nowak, & Cloutier, 2004).

Furthermore, accurate listening comprehension and improved segmentation lead to more accurate writing (in a way similar to English for example, where better perception and segmentation lead to not leaving out function words or reduced forms, Celce-Murcia et al., 2010; cf., “*sumomo*“ and “*aluminum can*” examples above for Japanese).

### **PRACTICAL SUGGESTIONS**

Despite the significance of pitch accent in Japanese, in JFL/JSL courses, pronunciation, let alone pitch accent, is rarely if ever taught. Instructors note that they do not have any chance to teach pronunciation nor have any confidence in teaching pronunciation (Kawasome, 2014) and that

pronunciation is often *atomashi ni naru* 'put off until last'. This paper advocates an approach based on the communicative framework prioritizing guided practice (Celce-Murcia et al., 2010), and enriched by less conventional methods such as dialect exposure.

### **Communicative Framework**

Following the guiding principle of a simultaneous dual focus on both form and meaning (Segalowitz & Hulstijn, 2005), pronunciation should be integrated into all skill activities (e.g., grammar, reading) to boost pitch accent awareness and facilitate more target-like (lexical) acquisition. Automaticity in pronunciation necessitates repetition with attention to form (Gatbonton & Segalowitz, 1988). Yet, repetitive drills oftentimes lack context, whereas meaning-focused activities lack the repetition necessary for automaticity. The solution to this pedagogical conundrum lies in devising activities that are intrinsically repetitive in nature while simultaneously being communicative (Gatbonton & Segalowitz, 1988). That is, in order to maintain a dual focus on form and meaning, activities should ideally require that learners accurately perceive/produce the target form in order to complete the activity (Loschky & Bley-Vroman, 1993; See Sicola and Darcy (2015), for more extensive discussion).

Within a communicative framework there are five stages: descriptive/analysis (metalinguistic awareness), listening, controlled, guided and communicative practice (Celce-Murcia et al., 2010). Learners are first made aware of pitch accent, gaining metalinguistic knowledge through simple explanations or exercises, e.g., marking accent in words, and deducing patterns. In the next stage, students listen for the feature, e.g., differences between minimal pairs or pitch patterns. In the following three stages, there is a gradual shift from a heavier focus on form (i.e., pitch accent patterns) to function (i.e., communication) with practice occurring within context and with repetition where communication hinges on correct pitch accent usage. Naturally, all these steps overlap and do not always progress in a defined order.

### **Dialect Exposure**

Exposure to non-standard dialectal pitch-accent patterns should boost metalinguistic awareness and improve perception/production of pitch accent (cf., Baker & Smith, 2010 for L2 segmentals). Simply put, exposure to dialect through hearing short, simple dialogs or extended speech where pitch patterns (along with other pronunciation features) between standard Japanese and Kansai Japanese differ could jolt students into greater awareness of pitch accent.

### **Examples of Activities**

We present activities which can be embedded into other lessons to boost the awareness of pitch accent. Simple activities include the instructor having the students notice the pattern by merely pointing it out or having students deduce the pattern. More complicated activities require retooling typical activities or supplementing lessons with entirely new activities.

Topic: Minimal pairs

Level: Beginner

Step: Awareness, listening discrimination, controlled practice, guided practice

Also: *hiragana*, *te*-form of verbs (instructions)

Activity: Total Physical Response (TPR)

The instructor uses the *te*-form of verbs (e.g., *-te kudasai* 'please do x') to instruct students to do something, using pitch-accent minimal pairs as in 'Please draw/write rain' (on the board/paper),

‘Please touch rain’ (a picture on the board/wall/handout), etc. After the instructor models TPR, the students then practice amongst themselves with the instructor monitoring.

Topic: Minimal pairs

Level: Beginner

Step: Awareness, listening discrimination

Also: *hiragana*

Activity: Bingo

The instructor creates bingo boards with minimal pairs differing in pitch accent (e.g., *hashi*, LH and HL) and plays bingo as an entire class or in small groups. Minimal pairs varying by vowel/consonant length can be added as well. The illustration below shows an example of a bingo card using both or just one member of the minimal pairs and fillers (e.g., spider).



Topic: Minimal pairs

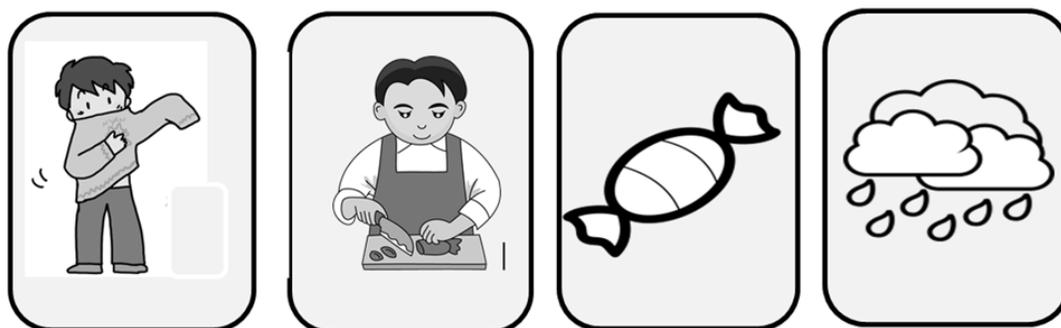
Level: Beginner

Step: Awareness, listening discrimination, controlled practice, guided practice

Also: *arimasu/arimasen*

Activity: Go Fish

The instructor creates sets of cards with the pictures of pitch-accent minimal pairs (to wear/to cut, rain/candy, etc.), as shown in the illustration below. Several small groups receive one set and pass out all the cards to the members of that group. Each student must in turn select another student and ask them if they have the matching card: If one student has the 'rain' card (*ame*), then they need to ask another student for another 'rain' card. They could use the grammar point *x ga arimasu ka* 'Do you have x?' to ask for the card they want. The other student would answer *hai, arimasu. hai, doozo* 'Yes, I have (it). Here you go.' if they have the 'rain' card or *iie, arimasen* 'No, I do not have (it).' Minimal pairs differing by vowel/consonant length or words with problematic segmentals could be included.



Topic: Loanwords

Level: Beginner/Intermediate

Step: Awareness, listening discrimination, communicative practice

Also: *katakana*, long vowels/consonants, ordering food, making a commercial, role-play, polite language, pragmatics, numbers/money, etc.

Activity: Ordering fast food

Loanwords are ideal for working on pitch accent as they are 'known words' (i.e., low cognitive load). Instructors can quickly tell the students the pattern for pitch accent placement or have students listen and guess the pattern. Practice can be embedded into lessons on ordering fast food (*-o kudasai* 'please give me x') or practically any grammar point, e.g., *McDonald's shakes are more delicious than Burger King's shakes* (comparatives). Students could also make a commercial advertising product.

Topic: 20 Questions/I spy game

Level: Beginner/Intermediate

Step: Listening discrimination, controlled practice, guided practice

Also: *hiragana*, modifying nouns

Activity: Asking questions 1

The instructor prepares objects, picture cards or handouts with pictures. The instructor models the activity having the students ask yes/no questions such as ‘Is it rain?’ (minimal pairs) or ‘Is it a red car?’ (adjective + noun), to guess what the instructor is thinking of. Afterwards, the students divide into smaller groups with one student imagining the object/picture and the others guessing. Also, the instructor could write a word/draw a picture on a piece of paper and attach a different one to each student’s forehead and have them mingle and ask each other questions about what is written on their forehead.

Topic: Describing habits, activities, etc.

Level: Intermediate

Step: Guided practice, communicative practice

Also: Verb forms, pragmatics

Activity: Asking questions 2

When reviewing or introducing new verb forms, the instructor can ‘mix-up’ the forms to practice shifting pitch accent patterns. For example, the instructor asks students what they or someone else did on the weekend/last night/last summer/etc. and then, what they or someone else does every weekend/every night/every summer/etc. The instructor can add other forms, e.g., *-masu* form or even the humble/honorific forms to practice shifting pitch accent patterns (and grammatical forms, pragmatics).

Topic: Academic talks

Level: Intermediate/Advanced

Step: Awareness, listening discrimination, controlled practice

Also: Grammar, vocabulary, rhetoric, speaking fluency, other pronunciation features

Activity: Recreating a talk

Students listen to a talk or excerpt (e.g., TEDxTokyo). The instructor has students mark a transcript for thought groups (where they should pause), fall in pitch, pitch patterns, etc. The students shadow along with the video, soundfile or instructor. Students also orally present the talk using the transcript or an outline. Students record themselves and self-evaluate their recording and/or receive feedback from the instructor.

Topic: Kansai dialect/folktales

Level: Intermediate/Advanced

Step: Awareness, listening discrimination

Also: Grammar, vocabulary, other pronunciation features

Activity: Noticing dialectal features

Instructors have students listen to sample sentences, dialogs or talks, using websites, TV shows, or movies, and make comparisons with standard Japanese. Some useful websites for the Kansai dialect include: <http://www.kansaiben.com/> and [http://www.eastudies.org/guide\\_kansaiben.html](http://www.eastudies.org/guide_kansaiben.html) and for folktales: <http://minwa.fujipan.co.jp/hagukumu/minwa/>. The students are put into small groups to point out the differences in pronunciation (and vocabulary, grammar). The instructor explains the features or has students compare dialogs in standard Japanese and Kansai Japanese. For instructors proficient in the Kansai dialect, they could create entire activities/lessons in a communicative framework, using the drawings and exercises from a textbook lesson for standard

Japanese replaced with the Kansai dialect. For example, the lessons on *shinakya* 'have to do' in standard Japanese could be easily modified for *senā akan* 'have to do' in the Kansai dialect.

For the folktales, the instructor could have the students listen to the folktale and then, orally recreate the story they heard in standard Japanese. Students could point out the differences they noticed with the instructor adding explanations.

## CONCLUSION

Pitch accent is an essential part of mastering not only Japanese pronunciation, but also global proficiency due to its connections to grammar, vocabulary, expository speech, reading, and pragmatics. As such, it is vital that time and effort be devoted to aiding learners in acquiring pitch accent. We hope these teaching tips will open up dialog among teachers concerning the teaching of pitch accent in JFL/JSL classes and offer suggestions as to how to do so effectively within a communicative framework.

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## ABOUT THE AUTHORS

Vance Schaefer (PhD, Second Language Studies, Indiana University, [schaefer@olemiss.edu](mailto:schaefer@olemiss.edu)) is an assistant professor of TESL and applied linguistics in the Department of Modern Languages at the University of Mississippi. He is an experienced JFL and EFL/ESL instructor. His research interests include L2 phonology, specifically lexical pitch perception and foreign accent, and pronunciation pedagogy.

Isabelle Darcy ([idadarcy@indian.edu](mailto:idadarcy@indian.edu)) is associate professor of second language psycholinguistics in the Department of Second Language Studies at Indiana University. She obtained a PhD in Linguistics and Cognitive Science from the Ecole des Hautes Etudes en Sciences Sociales in Paris (France) and from the Johannes Gutenberg University in Mainz (Germany); her research focuses on the acquisition of second language phonology, pronunciation instruction, and on L1/L2 speech perception and word recognition.

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