

Pitch accent in Japanese

I. Pitch accent basics

- (1) **Pitch accent** (as realized in most dialects of Japanese):
A fall from high pitch (H) to low pitch (L) within a word or phrase
- (2) Pitch accent patterns vary widely across dialects of Japanese, especially with respect to these questions:
 - (a) Is there a distinction between accented and unaccented words?
 - (b) What *positions* in a word can a pitch accent occupy, in principle?
 - (c) Where does the pitch accent (if any) occur in a *particular* word?
 - (d) Once we know where the pitch accent (if any) occurs in a word, is it possible to systematically predict whether the rest of the word will have H or L pitch?

II. Pitch accent in the Tokyo dialect

- (3) Examples (sound files on Sakai, in *Resources > Sound files > 4. Pitch accent*):
 - (a) [muráski] ‘purple’
 - abrupt pitch fall
 - L H L L tone shape
 - (b) [momoiro] ‘peach (color)’
 - no abrupt pitch fall
 - L H H H shape
 - (c) [iró] ‘color’
 - can’t hear the pitch fall — nothing follows the accent!
 - (c’) [iró-wa] ‘color-TOPIC’
 - if we listened to this, we would hear the pitch fall
 - LH(+L) shape when [-wa] is added
- (4) More examples, with topic marker

L H H H	H L L L	L H L L	L H H L
[sa.ku.ra (-wa)]	[ka.ra.su (-wa)]	[ko.ko.ro (-wa)]	[o.to.ko (-wa)]
‘cherry tree’	‘crow’	‘heart’	‘man’
- (5) Details of accent patterns in the Tokyo dialect — answering the questions in (2)
 - (a) There is a distinction between accented and unaccented words — unpredictable
 - (b) (more about this question in a later discussion)
 - (c) Speakers need to learn for each word which mora has the accent — unpredictable
 - Full disclosure: Accent location in *nouns* is fairly free in the Tokyo dialect, but *verbs* and *adjectives* are more restricted
 - (d) Other tones in the word:
 - All moras *after* the accented mora are L
 - All moras *before* the accented mora are H
 - The very first tone in a *phrase* is often lowered to L

- (6) How does the phonological grammar produce the H/L tone patterns in the Tokyo dialect?
- (a) **Whether** a word is accented, and if so **where** the accent is located, are specified in lexical entries (the “mental dictionary”)
- This is because *unpredictable* information must be *memorized* and *stored*
- (b) H and L tones are **assigned** to moras by the **phonological grammar**
- This is because the pattern of H and L tones is *predictable* once we know where the accent is

- (7) **Algorithm for tone assignment in the Tokyo dialect** (traditional analysis)
- i. If there is an accent, assign H to the accented mora and L to the following mora if any
 - ii. If the phrase is unaccented, assign H to the final mora (note that *no* L follows)
 - iii. Spread H leftward to any toneless moras
 - iv. Spread L rightward to any toneless moras
 - v. Optional: Change the first tone in a phrase to L, unless that mora is *accented*

For an advanced, more phonetically accurate view of pitch-accent assignment in Tokyo, see:

Pierrehumbert, Janet, & Mary Beckman. 1988. *Japanese tone structure*. Cambridge, MA: MIT Press.

Venditti, Jennifer. 2005. The J_ToBI model of Japanese intonation. In Sun-Ah Jun (ed.), *Prosodic typology*, 172–200. Oxford: Oxford University Press.