

How to Teach English Intonation to Japanese Students

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<Abstract>

The phonetic study of English language in Japan is a matter of great importance, a problem of major concern and a vital subject. The special difficulties which the Japanese college students have in learning English lie in the field of prosodic features of English, such as, syllable, rhythm, stress, intonation, prominence, etc.. These difficulties have made Japanese students' pronunciation relatively monotonous or mora(ness).

In my presentation, the specific phonetic features of Japanese language first will be discussed and clarified. And then the effective teaching method of intonation to improve Japanese students' pronunciation will be suggested. Finally, the oral dialogue with intonation analysis and transcription in the class room will be demonstrated to highlight the presentation.

How to Teach English Intonation to Japanese Students

By

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Summary

The phonetic study of the English language in Japan is a matter of great importance and a problem of major concern. The special difficulties which Japanese college students have in learning English lie in the field of the prosodic features of English, such as, syllable, rhythm, stress, intonation, prominence, etc.. These difficulties have made Japanese students' pronunciation relatively monotonous or mora(ness).

In this presentation, first the specific phonetic features of the Japanese language will be discussed and clarified and then an effective method of teaching intonation to improve Japanese students' pronunciation will be suggested. Finally, an oral dialogue with an intonation analysis and transcription as used in the class room will be demonstrated to highlight the presentation.

The intonation theory, tone marks and technical terms are, in all essentials, those of *Intonation of Colloquial English* by O'Connor, J.D. and Arnold, G.F., Longman, 2nd ed., 1982.

1. Specific phonetic features of the Japanese language

1.1. Mora (モーラ)

The Japanese language has moraness or moraic syllables, that

is, the rhythmic or timing features of Japanese is syllable-timed. It has been clarified that the Japanese language has a syllable-timed rhythm which consists of morae. A mora is a sort of "bamboo joint" in the sound production. Mora is the duration or length of a syllable. In Japanese, each mora which occurs regularly has equal duration in length. Moraness or moraic means the repetitional occurrence of mora. The total length of an utterance tends to be the sum of the morae within the sentence. The division of mora in the Japanese language is not always clear as shown below:

e.g.

「カネオクレタノム」(金送れ頼む・金お、くれた、飲む・
金送れた、飲む・金遅れ、頼む)

「おあややあやにおあやまり」(お綾や、垂矢に、お謝り)

「だるまさんがころんだ!」、 「にわにはにわにわとりがいる」

「ももすもももものうち」、 「なまむぎなまごめなまたまご」

In Japanese, a mora is composed of the combination of consonants, semi-vowels and vowels, such as;

1. single vowel, 2. a combination of a consonant and vowel,
3. a combination of a consonant, semi-vowel and vowel,
4. a single uvular nasal consonant [ɴ] (口蓋垂鼻音),
5. Sokuon (促音), 6. Choon (長音).

When semi-vowels are combined with vowels as in フ[ɸɯ], ヲ[ɸo], ヤ[ja], ヨ[jo], ュ[jɯ], [ɸ] and [j] are minor or secondary elements of one mora. In syllable-timed rhythm as mentioned above, the syllables are said to occur at regular intervals of time. It can be said that Japanese has isosyllabism.

In English, a phonetic syllable is a group of sounds that are pronounced together in a very close knitted utterance.

e.g.

In Japanese: 「ス ト ラ イ ク」 (6 morae)

●	●	●	●	●
○	○	○	○	○

「ア イ ス ク リ ー ム」 (7 morae)



「バンクーパー」 (6 morae)



In English: strike (1 syllable)

['strɪk]



ice cream (2 syllables)

['aɪs kri:m]



Van cou ver (3 syllables)

[væn 'kʊː və]



In English, the stressed syllables tend to occur at regular intervals of time, regardless of the number of intervening weak syllables which occur within a foot. It can be said that English has isochronism or isochrony (英語の等時性).

A. [* 'Tom 'sɪts ɒn ðe 'grɑːs.]

B. [* 'Tom ɪz 'sɪt-ɪŋ ɒn ðe 'grɑːs.]

| - a tendency toward isochronism - |

C. [* * - - * - *]
 'Tom 'sits on the 'grass with 'John. ||
 ⊙ ⊙ ⊙ ⊙ ⊙

D. [* - * - - - * - - - *]
 'Tom is 'sit-ting on the 'grass with Mr. 'Smith. ||
 ⊙ ⊙ ⊙ ⊙ ⊙ ⊙

|----- a tendency toward isochronism -----|

1.2. Sonority

Japanese students tend to confuse stress with sonority. In Acoustic Phonetics, sonority means the degree of the distance which the sound reaches or the loudness of a sound. Vowels are more sonorous than consonants. [a:] is more sonorous than [p], for example, when pronounced in the normal manner (with the same length, stress and voice-pitch). The sonority of the semi-vowel is greater than consonants but smaller than vowels. Among nasals, [m] is more sonorous than [N].

e.g.

In English:	b	æ	t	er	
	['b	æ	t	ə]	
	3	1	4	2	(degree of sonority)
	1	2	3	4	(degree of stress)

In Japanese: 「ト ○ ア ッ ○ タ ○ ー」
 ● ● ● ● ●

1.3. Uvular nasal [N]

Japanese sounds are classified into the following groups according to the positions or movements of the uvula.

(1) Indirect functions of the uvula:

- 1.oral --- The uvula touches the back of the pharynx.
- 2.nasal --- The uvula touches the back of the tongue.

3. nasalized vowel (vowel with nasality) — The uvula is lowered.

4. nasal with vowelness [N] — The uvula is lowered.

(2) Direct functions:

1. uvula fricative or trill — [R],[ʁ].

2. The place of articulation is the uvula.

In Japanese, [m],[n] and [ɲ] occur as word-initial nasals, but neither [ŋ] nor [N] occur in the word-initial position. Nasality occurs in the 「マ」 series, 「ナ」 series, 「ガキグケゴ」 (鼻濁音) and 「ン」. The Japanese 「ン」 is characterized as a regressively assimilated syllabic nasal or regressive-assimilated moraic nasal (逆行的同化性成節鼻子音).

In the case of [n] in [ni], the tip and sides of the tongue make wide contact with the palate. The [n] in [ni] has great palatality and is a palatalized nasal [ɲ]. In the case of [n] in [ini], the tip and sides of the tongue make wide contact with the palate. The [n] in [ini] has great palatality and is a palatalized nasal [ɲ]. Palatalization occurs greatly in [n] conditioned by the adjacent close-vowel [i] which hems in [n] in the combination of [ini].

[N] represents the sound value of the consonant [N] in the 「ン」 before [s],[z] or [ʃ], etc., and final position. [N] is an oral-coloured syllabic nasal or oralized moraic nasal (口腔化成節鼻子音). Advanced [N] occurs in [iN], [iN-i] conditioned by the adjacent front-close-vowel. Retracted [N] occurs in [ʉN], [ʉN-ʉ] preceded or hemmed in by a back-close-vowel.

e.g.

しんかんせん [ʃi ŋ ka N se N] (6 morae)










1.4. Lateral and flap









Occurrences of Japanese lateral and flap are as follows:

(-) alveolar lateral [l]

2.3. Teaching 7 Nuclear tones based on O'Connor & Arnold

下降・高下降	1. [˘]	˘yes	
低下降	2. [˨]	˨yes	
上昇・低上昇	3. [˨˥]	˨˥yes	
高上昇	4. [˥˥]	˥˥yes	
下降+上昇	5. [˨˥˨]	˨˥˨yes	
上昇+下降	6. [˥˨˥]	˥˨˥yes	
平板	7. [>]	>yes	

2.4. Teaching Rising Nucleus by contrast with Falling Nucleus

	<Falling>	<Rising>
<1 syllable>	˘west [˘west] 	˥west [˥west] 
<2 syllables>	˘west-ern [˘west ɚn] 	˥west-ern [˥west ɚn] 
<3 syllables>	˘west-ern-er [˘west ɚ n ɚ] 	˥west-ern-er [˥west ɚ n ɚ] 
<4 syllables>	˘or-di-nar-y [˘ɔː dɪ n ər ɪ] 	˥or-di-nar-y [˥ɔː dɪ n ər ɪ] 

2.5. Teaching sentence stress pattern

It is difficult for Japanese students to distinguish;


eighteen (*eight-teen*) [* -] and



eighty (*eight-y*) [* -].

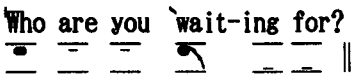

e.g.

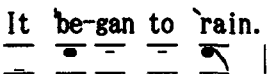

[* * - * - * - *]

2.7. *Using Intonation Pattern Practice*

In Echo Question, High Bounce tone group 

 || or  ||


1-A: Who are you wait-ing for? B: Who?
 || 

2-A: It be-gan to rain. B: Rain?
 || 

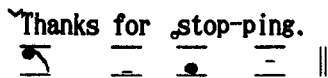
3. *Oral dialogue with intonation analysis and transcription*

Using verbal context or situational dialogues based on the theory of Connor & Arnold, Tentative Intonation Analysis & Practice

A Wildly-driven Taxi — London Taxi driver and Anna who is newly arrived from Poland (At Hyde Park)

A: Tax-i!


(A cab stops. Anna speaks to the driver through an open window.)

Thanks for stop-ping.


D: Where to?


A: Where? Cres-cent, please.


D: Which Cres-cent?

||

A: Pic-`ca-dil-ly ˘Cres-cent, please.
 | ||

T: Pic-˘ca-dil-ly ˘Cres-cent?
 ||

A: Yes. Pic-ca-dil-ly ˘Cres-cent.
 | ||

I'd ˘like to ˘see the ˘Stat-ue of ˘Lib-er-ty.
 ||

Oh, No, ˘E-ros.
 | ||

T: Oh! It's Pic-ca-dil-ly ˘Cir-cus, ˘isn't it?
 | | ||

A: Oh, yes! It should be Pic-ca-dil-ly ˘Cir-cus.
 || ||

D: Right.... Hop ˘in.
 || ||

(Anna opens the door and gets in the cab.
 The cab starts to move.)

A: I ˘thought it was Pic-˘ca-dil-ly ˘Cres-cent.
 ||

D: No, No! Pic-ca-dil-ly ˘Cir-cus. Where are you ˘from?
 | || || ||

A: War-saw, Po-land. I'˘ quite a ˘strang-er in ˘Lon-don.

↘ _ | ↘ _ || _ ↘ _ _ _ _ _ _ _ ||

D: Oh, 'yes! I 'thought you ,were. 'When did you ar- 'rive?
 ↘ ↘ || ↘ ↘ || ↘ _ _ _ _ ↘ ||

A: 'When? The 'day be-fore 'yes-ter-day in the 'e-ven-ing.
 ↘ || _ _ _ _ _ _ _ _ ↘ _ _ ||

D: From ,War-saw?
 _ _ . _ ||

A: No! From Brus-sels, Bel-gium.
 ↘ || _ ↘ _ | ↘ _ ||

D: From ~Brus-sels, ~Bel-gian. ~Real-ly! ~Why?
 _ ↘ ↘ | ↘ ↘ || ↘ ↘ || ↘ ||

A: ~Why? I 'took a 'plane from Brus-sels to Heath-row.
 ↘ || _ _ _ _ _ _ _ _ ↘ _ _ ||

,Well.
 ↘ ||

'How 'long will it 'take to 'get to 'Pic-ca-dil-ly 'Cir-cus?
 ↘ ↘ _ _ _ _ _ _ _ _ ↘ _ ||

D: I 'don't know. It de- 'pends on the ,traf-fic.
 _ _ ↘ || _ _ ↘ _ _ _ . _ _ ||

A: Is it 'heav-y in Ox-ford street?
 _ _ _ _ . _ _ _ ||

D: 'Al-ways ,heav-y.
 ↘ _ _ . _ _ ||

A: Can you 'make it in ten 'minutes? 'Hurry, please.

D: I'm 'always in a 'hurry.

'Go-ing a- 'gainst a 'red 'light,.....

'jump-ing the 'lights,... 'break-ing the 'speed 'limit,...

ig- 'hor-ing 'one-way 'traf-fic,.....

not 'stop-ping be-fore 'cross-ing the 'rail-road 'tracks,...

A: 'Real-ly!

Do you 'get 'traf-fic 'ti-ckets for 'speed-ing?

B: 'Oh. 'Yes. Of 'course. 'Quite 'often.

A: Could you 'stop here? I 'don't 'want to 'die!

B: 'Well,..... 'Please your- 'self.

(Pulls up with a screech of tyres.)

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