

A Statistical Study of Colloquial English Intonation for Japanese

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1. Purpose

It sometimes happens that learners of English can pronounce isolated sounds correctly and read phonetic symbols sufficiently, but have difficult problems in carrying out accurate prosodic features. The use of wrong intonation is sometimes the cause of misunderstanding of speaker's attitude, connotation and shades of meaning, etc.. However accurately students can pronounce the nuclear tone or tone-group of English, they have to learn how to connect tone-groups properly for suitable sequences in respect to meaning or implication.

Even though we may have much knowledge of music, we will never become a good pianist without continuing practice. Or suppose we go to art exhibitions hundreds of times, still we are unable to paint as an artist does. It is the same with English. Practice is needed for our students to handle intonation and become a good speaker. Even we have a broad knowledge of English grammar and already know hundreds of words, I would say speaking with correct prosodic features is still a matter of crucial importance.

The purpose of this study is to determine what sort of fundamental intonation patterns should be taught to Japanese students. It is necessary for Japanese learners of English to be proficient in tone groups and tone group sequences of colloquial English intonation.

2. Japanese Mora and English Syllable

Japanese students have special difficulties in learning English and face a particularly serious problem. The special difficulties which Japanese students have in learning English lie in the field of the prosodic features of English, such as, syllable division, rhythm, stress, intonation and prominence. Generally speaking, these difficulties have made Japanese students' pronunciation relatively monotonous or mora(ness).

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, for example, 「sa n kusu」 (4 morae), 「ko n sa a to」 (5 morae), 「su to ra i ku」 (5 morae), 「ma ku do na ru do」 (6 morae), 「ha n ba a ga a」 (6 morae), 「a i su ku ri i mu」 (7 morae), 「ko n ta ku to re n zu」 (8 morae).

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

3. The Importance of Prosody

3.1. Intonation is the soul of a language

W. Stannard Allen (1960:xiii)

Stress, rhythm and intonation should really be considered as a whole, for they are very closely connected elements of single aspect of the language that we might call Speech Flow.

Speech is essentially movement. However accurately we learn to pronounce the isolated sounds of a language we must still train ourselves to set them in motion in the right manner if we wish to make ourselves easily understood.

R.. Kingdon (1965:xiii) :

A foreigner who speaks a language with correct stressing and intonation but with incorrect sounds (within reasonable limits) will be better understood by natives than one whose sounds are correct but whose stressing and intonation are poor. -----

Intonation is the soul of a language while the pronunciation of its sounds is its body, and the recording of it in writing and printing gives a very imperfect picture of the body and hardly hints at the existence of a soul.

D. Jones (1978:2)

He must learn the proper usage in the matter of the “sond-attributes” or “prosodies” as they are often called (especially length, stress and voice-pitch).

A.C.Gimson (1981:314) :

Similarly, a listener May misinterpret a speaker’s attitude because his (the listener’s) intonation habits are somewhat difficult, although the two segmental systems do not differ.

(315) :

He should be skilled, for instance, in the use of the falling-rising pattern, occurring both on a single word and spread over two or

more words. This pattern is extremely common in RP and is important for conveying many nuances of doubt, encouragement, unspoken implications, etc., which in other languages might require more explicit lexical or syntactic cues. The learner should also note the frequent use of emphatic falls on pre-nuclear accented syllables (.....) which are a common feature of natural discourse --- as opposed to much reading aloud.

3.2. “the most comprehensive and useful account”

The intonation of English has been studied in greater detail and for longer than that of any other language. No definitive analysis, classifying the features of RP intonation, has yet appeared (though that presented by O'Connor and Arnold (1973) provides the most comprehensive and useful account from the foreign learner's point of view).

4. Methodology and Materials

Statistics of frequency of tone groups and tone group sequences have been gathered in order to clarify which tone group patterns are important to Japanese.

The tone groups and tone group sequences discussed in this paper are cited from the following dialogues:

Materials 1. Dialogue for English Intonation A : *Being involved in the car accident*----- *Husband, John & Wife, Barbara* ----- Written by Masaki Tsuzuki (1995), Collaborated with Masaki Taniguchi and Revised by Michael Ashby (1997): Recorded by Michael Ashby and Jill House, London University (1997). **2.** Dialogue

for English Intonation B : *A Wildly-driven Taxi* ----- *London taxi driver and Anna who is newly arrived from Poland* -----Written by Masaki Tsuzuki (1995), Collaborated with Masaki Taniguchi and Revised by Michael Ashby (1997):Recorded by Michael Ashby and Jill House, London University (1997).

Materials 2. (A) J. D. O'Connor and G. F. Arnold; *Intonation of Colloquial English*, 1980, pp. 278-283. (B) G. F. Arnold and O. M. Tooty; *Say It with Rhythm 3*, 1980, pp. 20-38. (C) G. F. Arnold and A. C. Gimson; *English Pronunciation Practice*, 1982. pp. 34-87.

The author's attitude to phonetic study is based on considering not only physical evidences but also the sense impression aurally and orally. Regarding the attitude of the study, speech sounds are clarified by sense impression of ① auditory impression and ② articulatory feeling, and the observation of ③ acoustic data.

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.

5. Statistical Data

5.1. 2 1 9 6 tone groups and frequencies (M. Tsuzuki:1990)

2 1 9 6 tone groups are classified as shown below:

1. Low Drop tone group	185	8.42 %
2. High Drop tone group	916	41.71 %
3. Take-Off tone group	211	9.60 %
4. Low Bounce tone group	95	4.32 %
5. Switchback tone group	422	19.21 %

6. Long Jump tone group	115	5.23 %
7. High Bounce tone group	56	2.55 %
8. Jackknife tone group	39	1.77 %
9. High Dive tone group	78	3.55 %
10. Terrace tone group	79	3.59 %
total	2196	100 %

The frequency of the High Drop tone group is the highest use of all the tone groups. The second highest is the Switchback tone group.

5.2. Tone group sequences and frequencies (M. Tsuzuki:1990)

Switchback + High Drop tone-group sequence	9 2	
17.00%		
High Drop + Take-Off tone-group sequence	8 5	
15.71%		
High Drop + High Drop tone-group sequence	7 6	
14.04%		
Terrace + High Drop tone-group sequence	3 1	5.73%
Switchback + Switchback tone-group sequence	1 5	2.77%
High Drop + Switchback tone-group sequence	1 3	2.40%
Low Bounce + High Drop tone-group sequence	1 1	2.03%
	323	59.71%
Others	218	40.29%
Total	541	100%

The following 3 tone group sequences are important. There are 2 5 3 examples, 46.75%.

Switchback + High Drop tone-group sequence

High Drop + Take-Off tone-group sequence

High Drop + High Drop tone-group sequence

5.3. Tone group Ending (M. Tsuzuki:1990)

1. Low Drop Ending	47	8.68%
2. High Drop Ending	274	50.64 %
3. Take-Off Ending	134	24.76 %
4. Low Bounce Ending	10	1.84 %
5. Switchback Ending	37	6.84 %
6. Long Jump Ending	23	4.25%
7. High Bounce Ending	2	0.36 %
8. Jackknife Ending	11	2.03 %
9. High Dive Ending	3	0.55%
10. Terrace Ending	0	0%
total	541	100 %

5.4. Tone groups in Dialogue A and B (M. Tsuzuki:1997)

1. Low Drop tone group	7	4.37%
2. High Drop tone group	64	40.00%
3. Take-Off tone group	5	3.12%
4. Low Bounce tone group	18	11.25%
5. Switchback tone group	49	30.62%
6. Long Jump tone group	5	3.12%
7. High Bounce tone group	8	5.00%
8. Jackknife tone group	0	0%

9. High Dive tone group	2	1.25%
10. Terrace tone group	2	1.25%
total	1 6 0	100%

6. Considerations:

6.1. In respect to 1997's statistical data

In respect to Dialogue A and B (1997), the frequency of the High Drop tone group is 40.00%, that is the highest use of all the tone groups. The second highest is the Switchback tone group at 30.62%. The frequency of the Low Bounce tone group is 11.25%.

The results say that High Drop and Switchback tone groups are commonly used and important. Statistical frequencies of other tone groups may be of minor importance.

The sequence of High Drop tone group + High Drop tone group and the sequence of the Switchback tone group + High Drop tone group are commonly used.

The tone group sequences ending with the High Drop tone group are commonly used --- that is, 26 examples, 68.42% of the whole tone group sequences.

High Drop ending	26	68.42%
Take- offending	3	7.89%
Low Drop ending	4	10.52%
Low Bounce ending	1	2.63%
Switchback ending	4	10.52%
Total	38	100%

6.2. In respect to 1990's statistical data

In my previous study (1990), I have clarified the following:

① The High Drop and Switchback tone groups are seen with considerable frequency. So that, they should be taught, not only theoretically but also aurally and orally.

② The sequence of the Switchback + the High Drop, the High Drop + the Take off and the High Drop tone group + the High Drop tone group are very frequently used and are common.

③ The tone group sequences beginning with the High Drop tone group and the Switchback tone group are commonly used.

④ The tone group sequences ending with the High Drop tone group and the Take-off tone group are commonly used.

6.3. In respect to the whole statistical data

Considering the whole statistical data (1990 and 2000), it can be said that the High Drop, the Take-off and the Switchback tone groups are very commonly used and can be of major importance in teaching intonation to Japanese.

7. Conversation Materials

(separately printed)

8. Conclusion

Even in Japan, millions of books written in English are readily available, so opportunities to encounter written language are plentiful if we want to take advantage of them, but opportunities to engage in spoken live-language are far fewer. It is therefore very important for our students to make full use of opportunities to speak. Silent reading is nonsense for our students from the standpoint of spoken live-language performance.

The focus should be on recognizing the seven basic nuclear tones, analysing intonation structures, distinguishing intonation patterns and then on the way of improving speaking ability using sufficient verbal contexts of intonation (mini-dialogue). The focus is chiefly concerned with identifying, describing and analysing tone-group sequences.

We are faced with the complicated theory of Southern British English intonation on the one hand and difficult realization of it on the other. Learners of English have special difficulties in employing “rising tune” and “falling + rising tune”. If students are taught pitch movements by indicating dots graphically between two horizontal lines, they can easily understand the whole shape of pitch movements.

In order to be skilled in reading or speaking English, we have to learn intonation theoretically, improve our intonation and develop our style of English intonation by acquiring the way which suits us best.

Since the term allotted for English education is short and limited, I would like to request that our students try their utmost concentration and full participation in his or her class. It is the goal of lectures on English Phonetics to orient students toward an excellent command of English intonation.

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