

# JAPANESE LEARNERS' ENGLISH INTONATION: DISCREPANCY BETWEEN INTONATION INTENDED AND INTONATION PERFORMED

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## ABSTRACT

This research attempts to clarify the difference between Japanese learners' intended tonicity and performed tonicity, i.e., between their knowledge and practice. The results were as follows: (1) The subjects tended to put a nucleus on the stressed syllable of the last word in each intonation phrase. They typically used high level pitch to highlight the word that they thought they had to put a nucleus on. (2) Their intended tonicity was strikingly better than their performed tonicity. (3) There was greater discrepancy between intended tonicity and performed tonicity when they had to find correct tonicity on their own than when they were provided with it. (4) We need to consider two kinds of errors: (a) error in intended tonicity (error in knowledge) and (b) error in performed tonicity (error in putting knowledge into practice). (5) Teaching tonicity requires providing with knowledge plus exercise to put knowledge into practice.

**Keywords:** English, Japanese, intended tonicity, performed tonicity

## 1. INTRODUCTION

[5] says, "The most important decision the speaker makes in selecting an intonation pattern is to decide where the nucleus goes: which is the last word to be accented. In doing this the speaker chooses the **tonicity** of the intonation phrase." He also says in personal communication as well as in his lectures in the UCL Summer Course in English Phonetics that tonicity may bear the most important of the three T's: tonality, tone and tonicity.

It was pointed out in [1] and [2] that tonicity may be the weakest point that Japanese learners have in learning English intonation. It was also pointed out in [3] and [4] that even though they make mistakes in tonicity they may be aware of

what the correct nucleus placement should be but they fail to take the appropriate action. They tend to use high level pitch on the part of the intonation phrase where they think the nucleus should be placed, instead of using a tone. This is almost certainly due to interference from Japanese intonation, in which high level pitch is often used to highlight the most important part of the message. This suggests that there may be a gap between what they intend to do, or aim at doing, and what they actually end up performing in English intonation.

This research therefore attempts to examine the discrepancy between the tonicity that Japanese learners of English intend to use and the tonicity they actually use in their performance.

## 2. EXPERIMENT

The subjects were two groups of Japanese learners of English, Groups A and B, who were university students studying English as their major subject. Group A consisted of 39, and B, 63. Each group was given two tests. Group A took Test 1 and then Test 2A two weeks later. Group B took Test 1 and then Test 2B two weeks later. Test 1 was therefore given to both groups. In this test, the subjects were asked to read the Test Dialogue, shown below, silently first. The dialogue was provided with intonation phrase boundaries. The subjects were then asked to underline the syllable that they thought should be the nucleus in each intonation phrase. They were then asked to read the dialogue aloud, and it was recorded on tape.

The same dialogue was used in Tests 2A and 2B. The difference between Tests 2A and 2B was that in the former, the underlining of all the correct nuclear syllables and the types of tones to be used were provided for the subjects. In the latter, on the other hand, the same procedure was taken as in Test 1. The instruction for Test 1 and Test 2B went as follows:

**Test 1 and Test 2B**

Instruction: In each intonation phrase, there is one nucleus (nuclear syllable). Underline the nucleus. Give one of the three tones: Fall ( \ ), Rise ( / ) or Fall-Rise ( \ / ) just before (or above) the nuclear syllable as in the example. Then read the whole dialogue out for recording.

The instruction for Test 2A said as follows:

**Test 2A**

Instruction: Read the whole dialogue out for recording. Use the tones and tonicity provided.

The Test Dialogue for Test 2A was precisely as shown below, but the one for Test 1 and Test 2B was without the underlines and tone-marks, except that those in the first line were provided for all three tests.

- A | Are you going to the /party tomorrow? |  
 .....Example  
 B | \Yes! |  
 A | What \time shall we meet tomorrow? |  
 B | Shall we meet at three /thirty? |  
 A | How about \four thirty? |  
 B | Isn't four thirty a bit /late? |  
 A | I don't \think it's late. |  
 B | The party begins at five o'clock. |  
 A | All /right, John. | How about \four |  
 instead of four \thirty? |  
 B | I guess \that will do. |  
 A | Are any Olympic /athletes coming to the  
 party? |  
 B | Three \medallists are coming. |  
 A | Who \are they? |  
 B | \One of them | is Donald \Dolphin! |  
 A | He got six Gold /Medals | and one  
 \Silver Medal. |  
 B | He's a very good \swimmer! |  
 A | He's an \excellent swimmer! |  
 B | I think he came to Japan in nineteen  
 eighty \nine. |  
 A | And he came again in nineteen \ninety  
 nine. |  
 B | Will he come to Japan again /next year? |  
 A | \Yes. |  
 B | I \thought he would. |

A | If I remember cor\rectly, | he'll come yet  
 a\gain | the year \after next. |

**3. RESULTS**

The results were as follows: (1) The subjects tended to put a nucleus on the stressed syllable of the last word in each intonation phrase. They most typically used high level pitch to highlight the word that they thought they had to put a nucleus on, as pointed out in [3] and [4]. (2) Their intended tonicity was strikingly better than their performed tonicity. (3) There was greater discrepancy between the intended tonicity and the performed tonicity when the subjects had to find correct tonicity on their own than when they were provided with it. (4) We need to think of two kinds of errors: (a) error in intended tonicity (error in knowledge) and (b) error in performed tonicity (error in putting knowledge into practice). (5) Teaching tonicity requires providing with knowledge plus a sufficient amount of exercise to put the knowledge into practice.

**3.1. IP-final nucleus placement**

The subjects had a tendency to place a nucleus on the stressed syllable of the last word in each intonation phrase. They did not seem to be aware of contrast between old information and new information. An example can be seen in Table 1:

**Table 1:** Results of

- A | What time shall we meet tomorrow? |  
 in the context:  
 A | Are you going to the /party tomorrow? |  
 B | Yes! |  
 A | What time shall we meet tomorrow? |

percentage	What	time	meet	mo
Test 1 Intended	4	53	24	1
Test 1 Performed	2	32	18	72
Test 2 Intended	2	52	21	16
Test 2 Performed	4	50	16	74

The majority of subjects (72-74%) placed a nucleus on the stressed syllable of the last word, "tomorrow", even though it was not only old information but also a time adverb, which should be deaccented, as is pointed out in [5].

### 3.2. Intended tonicity vs performed tonicity

Even though most of the subjects seemed to fail to recognize the presence of old and new information, their intended tonicity was strikingly better than their performed tonicity. This may mean that they were aware of the old and new information but that they were unable to use proper English tones on the syllables where they intended to do so.

**Table 2:** Results of

- A | How about four thirty? | in the context:  
 B | Shall we meet at three thirty? |  
 A | How about four thirty? |

percentage	How	bout	four	thir
Test 1 Intended	0	0	76	7
Test 1 Performed	0	0	18	65
Test 2 Intended	0	3	76	5
Test 2 Performed	0	0	29	61

As is seen in Table 2, 76% of the subjects in both tests intended to place a nucleus on the correct syllable, “four”, and only 5-7% on the first syllable of the last word, “thirty”. However, in their actual performance, only 18-29% placed a nucleus on “four” and 61-65% placed it on the first syllable of “thirty”, which means the results of their performance were completely reversed from their intention.

### 3.3. A typical feature in the way Japanese learners highlight the message

[3] and [4] pointed out that Japanese learners tended to use high level pitch on the part of the message which they intended to highlight, and this may be due an interference from Japanese intonation. The existence of this tendency was confirmed in the experiment of the present research. Virtually all who placed a nucleus on the first syllable of “thirty” in Table 2, for example, used high level pitch on “four”.

Another example is found in Table 3:

**Table 3:** Results of

- A | He’s an excellent swimmer! |  
 in the context:  
 B | He’s a very good swimmer! |  
 A | He’s an excellent swimmer! |

percentage	ex		swim
Test 1 Intended	74		6
Test 1 Performed	41		52
Test 2 Intended	86		5
Test 2 Performed	53		44

A vast majority of the subjects intended to place a nucleus on the first syllable of “excellent”, but instead, they typically used high level pitch on “excellent”, and then used a falling tone on the first syllable of “swimmer”, which is perceived as a nucleus by native speakers of English.

The same is true with the example in Table 4:

**Table 4:** Results of

- A | And he came again in nineteen ninety nine. |  
 in the context:  
 B | I think he came to Japan in nineteen eighty nine. |  
 A | And he came again in nineteen ninety nine. |

Percentage	gain	nine	nine	nine
Test 1 Intended	23	3	40	2
Test 1 Performed	62	2	2	73
Test 2 Intended	17	2	73	3
Test 2 Performed	34	2	30	64

In Test 1, only 2-3% of the subjects intended to place a nucleus on the last word, “nine”, but 73% in Test 1 and 64% in Test 2 actually placed it there in performance.

It is clear that they were aware of the contrast between “eighty” and “ninety”, but most of them could not actually express their awareness in their intonation performance.

### 3.4. Failure to perform English intonation idioms

Another feature exhibited by the subjects was their failure to perform English intonation idioms, which are discussed in [5], as is represented by the example in Figure 5:

**Table 5:** Results of

- A | Who are they? |  
 in the context

- B | Three medallists are coming. |  
 A | Who are they? |

percentage	Who	are	they
Test 1 Intended	48	16	14
Test 1 Performed	16	29	42
Test 2 Intended	27	51	13
Test 2 Performed	14	43	38

This example may prove that the subjects did not know the existence of English intonation idioms, such as discussed in [5], which says, “If a direct or indirect wh question has the pattern wh word – be – pronoun, then the nucleus goes on the verb *to be* itself. This need not involve narrow or contrastive focus of any kind.

Only 10% of the subjects in Group A intended to place a nucleus on the correct word, “are”. Interestingly, 59% intended to place a nucleus on “Who”, but 62% actually placed it on the last word, “they”, which goes with 3.1 above (IP-final nucleus placement).

This example shows that both their intended tonicity and performed tonicity were incorrect. From this, we may say that the subjects need to learn English intonation idioms in addition to general rules.

#### 4. Conclusion

From the results of the present research, the following things may be said:

1. Japanese learners studying English as their major subject generally have the knowledge that new information should be highlighted.
2. They, however, most typically use high level pitch to highlight the part of the message that they intend to put a nucleus on.
3. Instead they tend to put a nucleus on the stressed syllable of the last word in each intonation phrase, regardless of the context.
4. They seem to be unaware of the existence of English intonation idioms, for a majority of them scored low both in their intended tonicity and performed tonicity.
5. From these results, we may say that there are two kinds of errors in Japanese learners’ tonicity in English: (a) error in intended tonicity (error in knowledge = what to aim at) and (b) error in performed tonicity (error in putting knowledge into practice = hitting the target).

6. Correcting error type (a) can be done only with instructions, as was shown in one of the results above, i.e., they performed better when they were provided with correct tonicity.
7. However, correcting error type (b) requires not only giving proper knowledge but also providing with a sufficient amount of exercise to put the knowledge into practice. It means that it requires a good teacher, too!

#### 5. REFERENCES

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