

Teaching English Intonation

- A Case in Junior High School -

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This paper aims to identify the difficulties that Japanese beginner learners of English are likely to face when realising English intonation. For this purpose, it analysed the recordings of 34 junior high school students' reading aloud and examined their intonation from the perspective of Tonality, Tonicity and Tone. The result showed that they had a tendency to accent the last word of a sentence, whether it is the word that should be focused or not. Furthermore, their change in the falling pitch often stopped halfway through before reaching the bottom of the tone. Drawing on the results, pedagogical implications are suggested as a conclusion.

1. Introduction
2. Literature Review
 2. 1. An Overview of the Intonation System
 2. 2. Challenges in Acquiring English Intonation
3. Research Question
4. Study
 4. 1. Method
 4. 1. 1. Participants
 4. 1. 2. Material
 4. 1. 3. Procedure
 4. 1. 4. Analysis
 4. 2. Results and Discussions
5. Conclusion and Pedagogical Implications

1. Introduction

Intonation, which is "the use of the pitch of the voice to convey meaning" (Roach, 2009, p.3), plays a vital role in our communication in English as it conveys "linguistic and pragmatic meaning" (Wells, 2006, p.1). It expresses the speaker's attitude (the attitudinal function), indicates grammatical structures in speech (the grammatical function), highlights key information in utterances (the focusing function), signals contrast and cohesion in speech (the discourse function), organises speech into chunks easy to understand (the psychological function) and shows personal or social identity (the indexical function) (Wells, *ibid*). As these functions show, intonation enriches speech in terms of information.

It also has a significant influence on speech intelligibility,

and therefore deviations from native speakers' norm can result not only in a foreign accentedness (Mennen, 2015) but also in a failure in communication (Jenkins, 2000). This means that the acquisition of intonation is necessary for learners to better communicate with their interlocutors and that the skilful use of it will help the speaker be perceived as more intelligible (Pickering, 2004).

Despite the importance of intonation for successful communication, the teaching of intonation has not been sufficiently addressed in language classrooms (Wells, 2006). This deficiency may stem from the complexity of the intonation system and the difficulty in mastering English intonation (Roach, 2009; Mennen, 2015); or the problem may arise from educators' challenges; even experienced language teachers struggle to accurately perceive English intonation and hence to teach it to their students (Chapman, 2007). Regardless of underlying reasons, one thing which is certain is that there is room for further improvement in the teaching of intonation.

To address this instructional gap, numerous studies have been conducted. Some research has analysed learners' utterances and described problems in intonation use. Others have explored discrepancies in the intonation system between learners' first language and the target language, thereby trying to identify causes for the difficulty. These research findings have suggested effective ways to facilitate the acquisition of English intonation.

Though previous research has contributed valuable insights into the teaching of intonation, further research is essential, particularly concerning Japanese beginner

learners, a cohort that has not yet been thoroughly explored. This study, aiming to suggest pedagogical implications, first provides the concise description of the functions of intonation and then reviews previous research on challenges associated with learning and teaching English intonation. Subsequently, it analyses Japanese beginner learners' reading aloud focusing on the realisation of intonation. Finally, it provides pedagogical implications drawing upon the result of the analysis.

2. Literature Review

2. 1. An Overview of the Intonation System

Intonation is realised through the process called the three Ts: Tonality, Tonicity and Tone (Wells, 2006). Tonality involves segmenting speech into units of information, whereby the speaker signals syntactic boundaries of the sentence. The divided chunks are referred to as intonation phrases (i.e. IPs). Once the speaker has divided a speech and determined the IPs, he/she chooses one word to be accented as important information. This process, to decide where to place an accent, is Tonicity. Typically, the word to be accented is the last content word in an IP. The chosen word is made prominent by a specific pitch movement, and the process to decide the type of the pitch movement is the final T, Tone. The primary tone types include fall, which indicates the completion of the information, rise and fall-rise, which suggest an expectation of further elaboration. The falling tone is usually used for statements, exclamations, commands and wh-questions; the rising is for yes-no questions; and fall-rise suggests that the speaker has some implications to express (Wells, *ibid*).

When the speaker is to say, "I don't know what you are talking about" for example, the speaker first decides how to divide a sentence (i.e. Tonality). The whole sentence can be uttered as a single IP or divided into smaller segments (e.g. I don't know | what you are talking about). The next step involves selecting a part in an IP to be made prominent (Tonicity). If the speaker pronounces the sentence as a single IP, the word to be made accented is "talking", which is the last content word in the IP. Finally, the type of pitch is decided; the sentence above is a statement, and therefore the pitch movement to be applied is the falling tone.

2. 2. Challenges in Acquiring English Intonation

As many researchers have pointed out, learning and acquiring English intonation is not easy at all. de Bot and Mailfert (1982) indicates that the difficulty is even discouraging for learners. One of the causes for the difficulty is its intangible nature; identifying without any cues the type of tone and where in an IP the pitch movement occurs is challenging even for advanced learners (Chapman, 2007). Therefore, the use of technology making intonation visible (e.g. Praat) is suggested by previous research (de Bot and Mailfert, *ibid*; Levis and Pickering, 2004).

Another complicating factor is the context-dependency of intonation. Levis and Pickering (2004) conducted a study in which native speakers of English read aloud sentences presented in isolation and the same sentences embedded in a discourse and compared intonation realised in each setting. The result showed that the participants produced different intonation patterns, depending on whether the context was available or not. This study demonstrates that learners need to be sensitive to the context when realising intonation, suggesting that intonation should be taught in a discourse context, not only through isolated sentences (Celce-Murcia et al, 1996; Levis and Pickering, *ibid*).

Additionally, the discrepancy between learners' L1 and L2 makes the acquisition of intonation challenging. Whereas there are some features of intonation universal across languages (Wells, 2006), others may not be shared between L1 and L2. Hence, drawing solely on L1 knowledge when speaking L2 often leads to a breakdown in communication. This phenomenon, known as negative L1 transfer, is salient among beginner learners, whose exposure to L2 is insufficient (Mennen, 2015).

Even extensive exposure to L2 does not necessarily mean the successful acquisition of the L2 intonation system (Celce-Murcia et al., 1996). Saito (2018) conducted research on a group of Japanese learners who studied in English speaking countries for 10 months and found that their intonation remained anything but native-like and that their skill to use intonation did not improve much through studying abroad, suggesting that mere exposure to L2 without explicit instruction is insufficient for the acquisition of intonation.

In summary, the followings are recommended to facilitate the teaching of intonation; 1) use technology to make pitch movements visible; 2) teach intonation in a discourse context; 3) give explicit instruction on intonation.

3. Research Question

Although previous research has suggested valuable insights into how intonation should be taught, there is not much research conducted on Japanese beginner learners, and hence pedagogical implications for this group of learners are still limited. Therefore, this study aims to focus on beginner learners to explore difficulties they are likely to face in terms of intonation use, which will contribute insights as to aspects of intonation to be focused and taught in regular lessons and what explicit instruction should be given. The research question set for this purpose is as follows;

- When not given neither explicit instruction nor the description of the pitch contour, what aspects of intonation do beginner learners have difficulty in realising?

4. Study

4. 1. Method

4. 1. 1. Participants

Participants are students in their second year of junior high school. 36 students attended the lesson and took part in the experiment. However, two of them could not complete the submission of their recordings. Eventually 34 students' data were obtained and analysed.

The participants' English proficiency varies from novice to intermediate levels. Proficient students have Eiken 2nd Grade while some other students even have difficulty in reading aloud textbook materials.

4. 1. 2. Material

The material used for the experiment is a passage from the textbook adopted in the author's school, New Horizon English Course 2 (Tokyo Shoseki, 2020). Each section of the textbook contains a model speech available. For this experiment, Unit 4 Scene 1 (Tokyo Shoseki, *ibid*, pp.59) was selected. Below is the material text;

During your homestay, you are a member of the family. You are not a guest. You have to follow the house rules. If you have questions, ask your host family. It is important to communicate with them. You have to speak English, but you do not have to speak perfect English. Don't be shy, and enjoy your stay.

4. 1. 3. Procedure

The experiment was conducted within one lesson. The participants first checked the pronunciations and meanings of new vocabulary in the text and then listened to the text for the gist. After the listening activity, they read the text to comprehend the details. Subsequently, they practised reading aloud on their own for 10 minutes, during which they could listen to the model speech on their own devices as many times as they wanted to. The instruction was given to imitate the model speech as closely as possible. Finally, the participants read aloud the text to the devices and recorded their voice. Afterwards, they submitted their recordings via Google Classroom.

4. 1. 4. Analysis

The analysis was conducted by the author, using Praat as a support to identify pitch movements. The analysis consists of two parts; the author first listened to all the participants' recordings to explore which sentences they struggled to pronounce. Subsequently, the author picked up two sentences for further analysis to see on which word the participants placed the nucleus and what tone they applied to it. The sentences chosen are;

1. *It is important to communicate with them.*
2. *You have to speak English, but you do not have to speak perfect English.*

In the model speech, Sentence 1 is pronounced as a single IP. It has the nucleus on the word "communicate", not on "with" nor "them", as "communicate" is the last content word in the IP. This is the statement sentence, and therefore the falling tone is realised.

Sentence 2 is divided into two IPs; "You have to speak English | but you do not have to speak perfect English". The first IP has the nucleus on the word "English", and the tone is fall-rise, which indicates the IP has the following part. The second IP has the nucleus on the word "perfect", because the following word "English" is already shared in the first IP. The tone is falling for the same reason as Sentence 1.

4. 2. Results and Discussions

With regards to Sentence 1, 19 out of the 34 participants put the falling tone on the word "communicate", while 13 participants accented "them", the last word in the IP. One participant put the nucleus on the word "to". As for

Sentence 2, 14 participants highlighted “perfect” with the falling tone, whereas 20 of the participants put the falling tone on the word “English”. 13 participants accurately realised intonation on both sentences, whilst 13 participants accented the wrong words on both sentences. Seven participants successfully put the nucleus on the word to be focused in Sentence 1 (i.e. “communicate”) but not on “perfect” in Sentence 2. One participant accented the word “them” in Sentence 1, and yet successfully put the falling tone on “perfect” in Sentence 2. Table 1 summarises the number of participants by the word on which they placed the nucleus; and Table 2 shows the distribution of the participants who correctly pronounced both sentences, either Sentence 1 or 2 and neither Sentence 1 nor 2.

Table 1

	Sentence 1			Sentence 2	
accented words	<i>communicate</i>	<i>them</i>	<i>to</i>	<i>perfect</i>	<i>English</i>
No. of participants (%)	19 (55.9)	14 (41.1)	1 (2.9)	14 (41.1)	20 (58.8)

Table 2

	Both Sentences	Sentence 1 only	Sentence 2 only	Neither Sentence
No. of participants (%)	13 (38.2)	7 (20.6)	1 (2.9)	13 (38.2)

Overall, though there was the model speech available and the participants could listen to it as many times as they wanted, the participants who realised intonation accurately in both the sentences were only approximately 40 percent. This result demonstrates that explicit instruction and/or the description of the pitch contour is/are necessary for L2 learners to accurately produce intonation, as indicated by the previous studies (e.g. de Bot and Mailfert, *ibid*; Levis and Pickering, 2004, Saito, 2018).

One of the noticeable mistakes is to put a nucleus on a function word placed at the end of a sentence; in this study, about 40 percent of the participants accented a personal pronoun, “them” in Sentence 1. Considering that almost all the participants put the falling tone on the last word of other sentences in the passage (i.e. *family*, *guest*, *rules* and *family*), they, consciously or unconsciously, understood the rule that the last content word of a sentence is accented and overgeneralised it to the sentence in question. Otherwise, they did not understand the distinction between content and function words and pronounced Sentence 1 in the same way as other sentences. In either case, it is necessary to give

explicit instruction on this aspect of intonation.

Another common mistake is the misplacement of the falling tone on the word “English” in Sentence 2. This may be explained by the lack of learners’ discourse knowledge. They have been only exposed to very short passages and dialogues since they started learning English at secondary school, which rarely exhibit contrast between new and old information in a discourse context. As a result, the participants might not have been aware of the information structure of the passage used for the experiment and misplaced the falling tone. If this is the case, the result reiterates the importance of teaching intonation in a discourse.

Finally, with regards to Tone, nine participants were not able to realise the falling intonation properly; the change in the pitch stopped halfway through and did not reach the bottom. This deficiency is indicated by Matsusaka (1986), as one of the features of Japanese learners’ utterances. This may suggest that, along with the discourse-level practice, learners should be engaged in a sentence-level practice which solely focuses on changing the pitch from high or middle to the lowest.

5. Conclusion and Pedagogical Implications

This study explored difficulties which Japanese beginner learners are likely to face, for the sake of suggesting pedagogical implications for this group of learners. The results of this study suggest that Japanese beginner learners tend to put the falling tone on the last word of a sentence, whether it is a content word or a function word. Moreover, they may have difficulty in distinguishing new and old information, causing them to accent old information when it is placed at the end of a sentence. These tendencies may stem from the overgeneralization of the rule that the last content word in a statement sentence has the falling tone. In addition, the result of this study confirms the Japanese learners’ tendency, which previous research has indicated, that they tend to stop the pitch movement in the falling tone halfway in the middle of the process.

The pedagogical implications gained from this study are as follows; 1) give explicit instruction about the differences between content and function words in terms of intonation use; 2) use a discourse to teach intonation, particularly highlighting contrasts between new and old information; 3) have learners practise the falling tone so that they will be

able to change the pitch to their lowest.

Finally, this study analysed only 34 participants, meaning that the generalizability of the result is limited. Furthermore, it provided the participants with a model speech in the experiment. Therefore, it did not assess learners' ability to think on their own and determine the part to emphasise. Further research which overcomes these limitations will yield more insightful pedagogical implications.

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