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### PERCEPTION OF EFL INTONATION IN CONTEXT BY THE SPEAKERS OF TONE (CHINESE) AND INTONATION (RUSSIAN) LANGUAGES

Learning the intonation of a foreign language entails complex perceptive and productive processes mostly beyond the common awareness level. Its instruction demands a thorough understanding of its prosodic features and the appropriate pedagogical practices and resources. This paper reports the *findings* from a study of perceiving of EFL intonation by the speakers of tone (Chinese) and intonation (Russian) languages. The purpose of the research was to *find* out differences in understanding and recognizing of English intonation in context by the speakers of Russian and Chinese languages. The study consisted of six speaking classes conducted for four participants (two representatives of native speakers of each language group) with the use of various exercises, intonation awareness-raising activities and group discussions. The results reveal no unilateral dependence between success in perception of EFL intonation and the group of mother tongue.

Key words: tone and intonation languages, prosody, EFL intonation in context, perception, Highlighting, Tone, Key.

### Статтю подано мовою оригіналу

Intonation, as an integral constituent of comprehensibility in spoken language, has been given more attention recently. With the advent and development of the technology used to extract pitch melody during the latter half of the twentieth century, the research design of intonation studies remained mostly unchanged. The intonation system was perceived primarily as a series of pitch contrasts determined by the grammatical form of the utterance (such as declarative versus interrogative, and wh-questions versus yes-no questions). Typically, pedagogical practices implied participants to imitate short utterances produced by a native speaker (NS) and attempted to match the original pitch contour. During this time, however, researchers in discourse-based phonology and psycholinguistics were exploring the role of prosody in discourse. By comparing the separated sentences and the same sentences put in the coherent text read by the two NSs of English they demonstrated that intonation functions differently in discourse and at the sentence-level and emphasised the necessity to teach intonation in discourse to help learners use intonation for real communication.

Until now the studies dealt either with the perception of non-native English intonation by NSs regarding its resemblance of the native production or with the perception of non-native (NN) English intonation by non-native speakers (NNSs) regarding its assessment, preference or distinction.

However, the topicality of nowadays interactions more and more implies NNS – NNS interactions in various contexts: at work, on vacation, studying abroad in non-native speaking countries, EFL classroom interactions (when the teacher is an NNS) to name a few. It is important to find out how the native speakers of different language groups would understand the meaning of English intonation.

Tone and Intonation Languages. The distinction of intonation and tone languages is based on the influence of tone on altering the lexical meaning of the word. Both English and Russian are intonation languages. These two languages do not use the tone lexically – the words do not change the meaning depending on the tone of which they are said, but English and Russian use the tone for intonation. Chinese is a tone language. The same word can be pronounced with four different tones, and the lexical meaning of the word would ultimately depend on the choice of tone. Since Russian and English belong to the same language group (intonation), it was assumed that the native speakers of Russian would be more successful in recognition and understanding of English intonation than the native speakers of Chinese due to possible positive mother tongue transfer.

The research aimed to answer the following questions: is there any difference between how the speakers of tone (Chinese) and intonation (Russian) languages infer meaning and decipher EFL intonation in context?

The subjects of the research were four female advanced EFL students (two NSs of Chinese and two NSs of Russian) majoring in Linguistics at Lanzhou Jiaotong University. To reassure that the participants are at the same English proficiency level, their tests of English proficiency exams were compared. Since there were only two NSs of Russian (came from Russia (Jenny) and Ukraine (May)) that matched the requirements of the research, first, their English proficiency levelswere compared and later, the two Chinese participants were chosen (Selina and Chloe) in compliance with the English proficiency level of Russian native speakers' participants. It needs to be mentioned that a NS of Russian Jenny attended a course in English intonation before she joined the speaking classes.

The research was conducted through organised speaking classes. The content of the speaking classes was based on the Student's book. The total number of classes was six in accordance with the book chapters that covered prominent intonation features in context: Highlighting, Telling and Referring, Revision, Roles and Status of Speakers, Low Key Information, and Contrasts. The longevity of weekly classes was one hour and a half.

Each lesson consisted of four sections: perception test, production pre-test (communication activity preceding intonation awareness-raising activities), intonation awareness-raising activities, and production post-test (communication activity following intonation awareness-raising activities). One feature of English intonation (every time different) was studied each lesson: Highlighting, Falling tone, Falling-rising tone, Rising tone, Low key, High key.

At the beginning of each class (except for the third class), the participants were asked to share their ideas about the title of the unit and elaborate on what the words from the title mean in daily life to establish preliminary understanding of the feature. Then they were given diverse tasks (perception test) which included listening to the recording and answering comprehension questions or marking intonation in the text.

After that as a minor sense of the topic was established, the participants were given a communication activity – the task in the form of a role play between Student A and Student B – to first perform in mother tongue and right after – in English. The communication activity was given after topic introduction and perception test with the purpose of subconsciously arousing the participants' preliminary awareness of the English intonation feature per se, however, participants were not explicitly instructed to use the feature when performing communication activity.

Next, the participants were engaged in the intonation awareness-raising activities to study the form and meaning of the feature, learn to imitate and practice using it. At the end of the lesson, the participants were asked to practice what they had learned by performing the same communication task in English – production post-test. This time they were directly instructed to think how they would change their conversation to use the newly learned feature. All the classroom interactions were recorded, analysed and transcribed in Praat. Also, EFL learners were asked to fill in two questionnaires before and after the speaking classes.

To test participants' perception of English intonation, the section 1 "Sensitisation" of each of the units of the student's book was used. In this section, a particular feature of intonation was demonstrated in context. Using questions and tasks, the participants had to recognise and explain the use of the feature. The purpose of section 1 usage was to elicit how the participants understand English intonation feature before they were explicitly instructed on how to use the feature in context.

The participants were asked to listen to the conversation from section 1 (from student book's audio CD) for one time. Then participants were briefly introduced to the topic. After that, the open-ended questions and other tasks were administered to the participants to answer or perform based on the audio CD which was replayed for as many times as the participants needed. All the participants were asked to use their mother tongue when answering the questions, which would reassure the completeness and exactness of the answers.

The primary purpose of the English intonation perception testing was to find out whether the answers given by speakers of tone language would be somewhat different from the ones given by the speakers of intonation language.

Prominence Perception Test. The purpose of the Prominence perception test was to check the participant's ability to infer meaning from the discourse containing highlighted words or chunks. The participants' perception was also tested regarding being able to listen, distinguish and specify which words were given more stress. The Prominence perception test included three parts:

1) lead-in activity to get students thinking about the situation with the subsequent listening of the conversation and answering comprehension questions;

2) listening to the short extract of the discourse and marking highlighted words in the transcript according to what and how was said;

3) listening to the full conversation and writing down all the words that repeat in dialogue but sometimes are given stress and sometimes are not.

Analysis of Prominence Perception Test evidences the fact that the NSs of both language groups (tone and intonation) were able to infer the correct meaning of the prominent words from the context. Through group discussions and the facilitator's feedback on each task, all four participants understood the communicative function of Prominence by the end of the test. On the other hand, recognition of prominence was not an easy task to handle for the NSs of both groups of languages. There were participants who had relatively better (Jenny) and worse (May, Chloe, Selina) results, which could mean that the ability of the recognition of which words are given more stress within an utterance does not inherently depend on which mother tongue the learner speaks. In general, participants without previous English intonation training showed quite low performance in Prominence Perception Test that brings us to the conclusion on the necessity of explicit instructing of the form and functions of Highlighting in the EFL classrooms.

Tone Perception Test. The topic of tones was studied during three speaking classes. The three classes covered the significant tone patterns in the English language – falling (used when the information is new for the listener), falling-rising (assumes the information is not new for the listener or previously had been shared between interlocutors) and rising tones (shows that the speaker plays a dominant role). The aim of Tone Perception Test was twofold. First, to find out whether the speakers of tone and intonation languages would have any differences in opinions on the meaning of the use of tones in context. Second, to test their ability to recognise and distinguish various tone patterns.

Unlike Russian NSs, Chinese NSs both provided right answers to the questions about tone movement and its meaning. This signified that Chinese NSs were better at interfering the meaning from the context. However, according to the class observations by the facilitator and the feedback received after the task completion, the students' judgements were not entirely based on the knowledge obtained in the previous lesson. They were still mainly relying on their inner feeling and general understanding of the discourse they heard. This again proves the findings of the Prominence perception test: dealing with a shortened discourse to comprehend the meaning is quite challenging for the EFL learners. There is, therefore, a definite need for the Prominence perception training to pay more attention to eliciting the meaning of shorter chunks of discourse and discussing how the possible alternatives of pronunciation of the utterance would change its meaning.

The significant finding of Tone Perception Test is that it was quite tricky for the NNSs to verify the tone contours that coincided with the initial or final part (Table 1), for example, falling and falling-rising, rising and falling-rising. The most significant number of mistakes of both Russian and Chinese NSs resided at the confusion of falling-rising for falling. It means the listeners could hear the falling onset of the tonic syllable but had difficulties sensing its rising part. Russian NSs were a little better at recognising this specific pattern.

Analysis of Mistakes of the Tone Perception Test

Table 1

Correct Actual answer answer	NS of Russian					NS of Chinese			
	Falling	Falling- rising	Rising	Total		Falling	Falling- rising	Rising	Total
Falling		7	_	7			9	_	9
Falling-rising	6		6	12		4		7	11
Rising	-	5		5		1	5		6
No answer	_	-	_	-		_	2	_	2
Total	6	12	6	24		5	16	7	28

Interestingly, the least mistakes were made in confusing rising, and falling tones, specifically no such mistakes were made by the NS of Russian and only one such mistake made by the NS of Chinese, who confused falling tone for rising. This result is attributed to the significant difference between falling and rising contours, which makes it easier for the listeners to recognise and distinguish them.

The general performance of Russian NSs in the Tone Perception test was better than the one of Chinese NSs'. However, these findings should not be only explained by the positive mother tongue transfer, since in each mother tongue group (Russian and Chinese), some students performed better (Jenny and Selina) and worse (May and Chloe). So, it can be assumed that the perception of English tones is dependant on some other than only mother tongue characteristics. Supposedly, the absence of the knowledge about English intonation and its functions obstructed the participants from deriving the meaning of the use of specific intonation contours in context. Distinguishing tones one from another and explaining their meaning in the context turned out to be challenging for all participants, except for Jenny. The evidence that the participant who had prior English intonation training outperformed the other students favours the fact that explicit teaching of English intonation helps EFL learners to recognise intonation contours better.

Key Perception Test. Key (or pitch range) refers to the relative pitch levels of utterances or parts of utterances. There arethree keys – Low Key, Mid Key(regular pitch of voice) and High Key. All features are used in Russian language whereas Chinese language does not have Low Key. The use of Low Key, a drop of pitch level from mid to low on the first prominent syllable of a tone unit (onset), marks that part of what is said as being in some way equivalent in meaning to what was said just before (or sometimes what has been said immediately after). The use of High Key involves a move up in pitch level from mid to high on the first prominent syllable of a tone unit. High Key marks what is said at that point in the conversation as being in some way in contrast with something, which has already been said or implied, or with something, which is implicit in the context.

The structure of the tasks resembled the ones of the previous two perception tests – Prominence and Tone. As usual, the listeners were asked to read the comprehension questions then listen to the conversation and answer. The second task was based on the shorter extract of the dialogue used in the first part with marked Keys. The task was to listen to the extract and give an explanation of the connection in meaning between what is said with lowered or raised pitch and what the speaker or someone else says in the immediate context. The third part provided a transcript of the conversation (the same conversation as in the first part of the test or its extension) where the listeners were asked to mark either Low Key or High Key according to what they heard.

All four participants gave unanimous correct answers to the first two comprehension questions. As to the second question, the provided answers were not full. However, only three students out of four provided the correct answers to the third question. Only Chloe, NS of Chinese gave a mistaken answer. None of the NSs of Russian mentioned the connection between the utterances in a low key and mid key. Mostly, their answers were paraphrased Low Key utterances, which means that the idea of low key and the meaning it had was new and unclear to the Russian-speaking students. Surprisingly, the answers provided by Chinese NS were constructive, had a clear idea and illustrated general understanding. Hence, the conclusion that intonation features of a language are implicit and even the native speakers are not always aware of them; intonation is used at a subconscious level and quite often not paid attention to. As in previous two perception tests, it was revealed that the learners had nearly no problems explaining the contextual meaning of the features, but made many mistakes defining them in context. This brings us to the general

conclusion that listeners do not solely rely on intonation when inferring meaning. They rather make judgements based on what is said, not how it is said.

The fascinating finding of this test is that all students who had no previous intonation training performed in the third part of the Key Perception Tests nearly at the same level and only the student with background knowledge (Jenny) handled the test significantly better. This result proves that NNSs who had English intonation training become more sensitive to it and are better at recognizing its contours movement and change. As it was discovered in the previous perception tests, the NNSs of tone and intonation languages have least problems inferring meaning from the extended conversations. On the contrary, when it comes to relying on the suprasegmental features only in the shorter utterances, it seems that the task of explaining the meaning of the intonation becomes challenging.

Based on the results of Perception Tests, it can be concluded that making judgements about the meaning of the specific utterances in the extended context is easier for the EFL learners, as they can rely on more features of discourse (like, segmental) to infer meaning. On the other hand, if intonation is presented in short chunks and becomes nearly the only feature to consider, it complicates the understanding of meaning for both, the NSs of Russian and Chinese.

Whereas the explanation of the pragmatic meaning of English intonation features in context did not prove to be the challenging task for both groups of participants, the recognition of those features turned out to be much more complicated. The results of Prominence Perception Test revealed that the ability to hear the highlighting and mark it on the transcript is an equally daunting task for Chinese and Russian EFL students, even for the participant with background knowledge of English intonation. The low performance on the test could mean that the participants were not fully aware of the meaning Prominence carried in the context. Should they have known that, they would not solely rely on what they heard in the record and would have backed up their choice with the explanation of the reason for a specific word be made prominent, to the other.

In general, the students' performance in the perception tests was successful only when the tested feature coincided with the unit that was introducing it. However, if students were supposed to apply the previously received knowledge to contribute to another feature's perception test, they seemed to ignore that awareness and rely on their intuition. Perhaps, the lack of practice causes such insecurity of the studied features' use.

It can be concluded, that despite minor outperformance of Russian NSs the perception of English intonation features does not entirely depend on the mother tongue of the NNSs, nor on whether mother tongue and target language belong to the same group of languages. Since there were cases of individual beret performance both from the side of Chinese and Russian NSs, the current study suggests that perception of English intonation has something to do with the educational background or individual language aptitude of the EFL learner.

The fact that two languages like English and Russian have common intonation features does not necessarily lead to EFL learners NSs of Russian being more capable of recognizing of those features or explaining their meaning in context. When teaching English intonation, the native speakers of both Chinese and Russian should be treated equally in terms of their perception of EFL intonation features. All the obtained findings lay a solid pedagogical idea to teaching English intonation to the speakers of Russian and Chinese languages.

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# Бунецька І. М. Сприйняття англійської як іноземної інтонації в контексті учнями – носіями тональної (китайської) та інтонаційної (російської) мов

Вивчення інтонації іноземної мови спричиняє складні сприйнятливі та репродуктивні процеси, які в основному виходять за межі загального рівня поінформованості. Інтонаційна інструкція вимагає глибокого розуміння її просодичних особливостей і відповідних педагогічних практик та ресурсів. У статті представлені результати дослідження про розуміння інтонації англійської мови як іноземної учнями – носіями тональної (китайських) та інтонаційної (російських) мов. Метою дослідження було з'ясування відмінностей у розумінні та можливості відрізнити англійську інтонацію в контексті учнями – носіями російської та китайської мов. Дослідження складалося із шестимовних класів, що проводилися для чотирьох учасників (двох представників із кожної мовної групи) з використанням різних вправ, інтонаційної просвітницької діяльності та групових дискусій. Результати не виявили однобічної залежності між успіхом у сприйнятті англійської інтонації та групою рідної мови.

**Ключові слова**: тональні та інтонаційні мови, просодія, інтонація англійської мови як іноземної в контексті, сприйняття, наголошення, тон, ключ.

# Бунецкая И. Н. Восприятие английской как иностранной интонации в контексте учениками – носителями тонального (китайского) и интонационного (русского) языков

Изучение интонации иностранного языка влечет за собой сложные восприимчивые и воспроизводительные процессы, которые в основном выходят за пределы общего уровня осведомленности. Интонационная инструкция требует глубокого понимания ее просодических особенностей и соответствующих педагогических практик и ресурсов. В статье представлены результаты исследования понимания интонации английского языка как иностранного учениками – носителями тонального (китайского) и интонационного (русского) языков. Целью исследования было выяснение различий в понимании и возможности отличить английскую интонацию в контексте учениками – носителями русского и китайского языков. Исследование состояло из шести языковых классов, которые проводились для четырех участников (двух представителей из каждой языковой группы) с использованием различных упражнений, интонационной просветительской деятельности и групповых дискуссий. Результаты не выявили односторонней зависимости между успехом в восприятии английской интонации и группой родного языка.

*Ключевые слова*: тональные и интонационные языки, просодия, интонация английского языка как иностранного в контексте, восприятие, ударение, тон, ключ.