Study on the Effect of Stress and Rhetorical Structure on College English Discourse Listening

Dan Shen¹, Guojun Lu²

1Nantong Institute of Technology, 226002, China.
2Nantong University, 226001, China.

Abstract: From the perspective of "Schema theory" and "Rhetorical structure theory", the essay was discussed the effects of stress and rhetorical structure on English discourse listening. Through the means of action research, the authors briefly analyzed the process of teaching intervention and demonstrated the hypotheses with the research data.

Key words: Stress; Rhetorical Structure; English discourse

1. Introduction

College English discourse listening is regarded as a difficulty in English teaching. In recent years, many researchers have tried to interpret the acquisition process of English discourse listening from a new perspective. The traditional input-output training method can no longer meet the requirements of rapid and efficient acquisition under the current circumstances. On the view of textual structure schema and linguistic schema, the researchers used "Schema Theory" (Kant 1781) to study on English discourse listening. Schema theory includes linguistic schema, content schema and formal schema. Linguistic schema refers to the knowledge of language itself. Based on this theory, stress, one of the basic elements of English language, which is highly valuable. This element exists not only in words, but also in phrases and sentences. In English discourse listening, the level of understanding of "meaning groups" such as phrases and sentences determines the listeners' listening ability. The pause, liaison, ellipsis, stress and the length of the core words in the "meaning group" are the key means to help the listener grasp the content and details of the discourse.

Rhetorical structure theory (RST) is an analysis theory of discourse structure. Through the analysis of rhetorical relations between clauses, paragraphs and texts, to make learner grasp the structure and content of the whole article. Discourse listening activity can be seen as the continuous activation of the corresponding schema in the listener's mind according to the information and clues provided, finally it achieves the purpose of understanding. When interpreting the text content, the listener will recall in his memory about the rhetorical structure consistent with the text he has heard and grasp the macro construction and detailed information of the whole text with the help of the rhetorical marks and connecting words.

2. Overview of relevant research

Due to the wide and various types of College English listening discourse, it is most suitable for the actual expression of native speakers. In order to find a new method for College English discourse listening teaching, many researchers have discussed this issue. Richards(1983) and Power(1986) proposed listening skills lists for English dialogues and lectures as early as the 1980s. Olsen & Huckin(1990) found that even though listeners could understand...
most of the words in the discourse and lectures, they could not necessarily solve the main ideas and argumentative methods of the discourse. Because many texts are not organized and knowledge points are scattered. Kintsch & Yarbrough(1982) found that discourse marks on macro content play a positive role in listeners' better understanding. Barr(1990)[1] believed that pronunciation and intonation can provide reliable clues for listeners and help them reconstruct the subject content. He also proposed the concept of "sequence chain", which is a unit of intonation and is relied on to segment the content of a discourse or to judge the topic changing in listening.

To sum up, the above research consistently points out that English phonetics will have a certain impact on discourse listening. In addition, the form, structure and genre of a text play a vital role in content understanding and grasping the main questions of listening.

3. English stress and discourse listening

3.1 Recognition and definition of stress

Phonemes are the smallest phonetic units that distinguish meanings in language communication. Stress is one of the supra-segmental phonemes. Stress in listening discourse includes stress in words and stress in sentences. English is a stressed-timed language with roughly equal pronunciation time for each rhythmic unit. It means that syllables between the two stresses take roughly the same amount of time. Therefore, native English is to rise and fall, light and heavy, with a sense of rhythm.

In the teaching practice, it is found that some students grasp the phoneme more accurately, consequently, when they speak, they deliberately pursue the accuracy of pronunciation and pronounce each phoneme of each word very clearly, so as to increase the length of the sound that should be relatively fuzzy and short. In native English, the pronunciation of some words will shorten their pronunciation time by means of saving and darkening. At present, most students cannot distinguish which words are stressed and which are weak in the discourse listening materials, so they cannot understand the core "meaning group" of the listening materials.

3.2 Application of stress in discourse listening teaching

3.2.1 Teaching strategies of stress

(1)Start with phonetic symbols and syllables, read correctly makes listen correctly

Many students have a low phonetic foundation and have no obvious perception of the natural spelling of syllables. They always imitate and repeat. In teaching, we must make students know the distinction between vowels and vowel letters, consonants and consonant letters. Then we should understand the concepts of monosyllabic words, disyllabic words and polysyllabic words. We should read a word correctly and repeat it to form a phonetic memory in their mind. They could spell out the word by each syllable. We should ask students to be able to neatly use the vowel letters. For example, five vowels: "a", "e", "i", "o", "u", they will be changed in the stressed open syllable, stressed closed syllable and unstressed syllable respectively. Students should strengthen the review of basic pronunciation and remember some pronunciation rules to correctly read. Then they could listen to the precisely words in listening discourse.

(2)Explain the relationship between stress and the intensity of vowel letter in each syllable

First of all, the concept of open syllable and closed syllable should be clarified in teaching, so that students can find out the difference between strong and weak sounds. Taking British pronunciation as an example, the pronunciation of vowels in a small number of words has its particularity due to the influence of etymology, alphabetic combination order and syllable position. For example, when the letter "a" is after the sound /w/, it is stressed, and it is pronounced /o/. When it is before the letter "f", "n", "ph", "s", "th", etc., the letter "a" is pronounced /a:/. At the same time, we should also pay attention to the changes in the final syllable, the bursting and the blade-alveolar.

(3)Summarize the rules of stress through listening and reading training

Chomsky & Halle(1968)[2] proposed the concept of "strong group" and "weak group". The former refers to a phonetic series consisting of a long vowel followed by an indefinite number of consonants or a short vowel followed by two or more consonants. The latter refers to a phonetic series consisting of a short vowel followed by at most one consonant. Strong group stress, weak group weakly read.
In phonetic teaching, it is also necessary to point out to students a special law of stress—displacement. Stress is helpful to extract core words from listening materials. According to the stress discrimination test in listening teaching, the biggest problem is the stress shifting. In the tri-syllabic word stress discrimination, the back movement phenomenon is more prominent; For words of more than four syllables, the stress on the first syllable moves to the third syllable, the stress on the second syllable moves to the fourth syllable and the stress on the third syllable moves to the first syllable[3]. The stress recognition of compound words is low and most people usually mark the second syllable of compound words as stress. In view of this phenomenon, students should be guided to understand the importance of stress in listening and distinguishing discourse, to understand the differences between Chinese and English phonetic systems, to effectively suppress the stress shift and avoid the negative transfer of Chinese pronunciation.

3.2.1 Stress in the sentence

When listening to English discourse, one cannot grasp the meaning of the discourse quickly without grasping the core words. The words which convey important information stress in a sentence. Conjunctions, auxiliary verbs, determiners, prepositions and other function words weakly read. In discourse listening, we do not try to hear every word, it is unrealistic to react to the meaning of every word in a very short time. When listening to the discourse, we should grasp nouns, verbs, adjectives, adverbs, numerals and other information words, these words are very helpful to understand the sentences or complete the questions. In the teaching, students are required to understand the boundary between non-stressed words and stressed words naturally by using the training of stress timing and combining the skills of weak reading, linking reading and assimilation.

4. Rhetorical structure and discourse listening

4.1 Rhetoric structure theory

RST (Rhetorical Structure Theory) originated from Mann & Thompson (1988), who published their papers in Text. They believed that there is an invisible relationship between clauses and paragraphs in English discourse. It determines the basis between two structural paragraphs and relies on a framework built on the three basic concepts of core, constraint and effect[4]. The combination of the discourse is hierarchical. The relationship between two clauses is the lowest. The relationship among multiple clauses is higher. The semantic relationship between larger language units is the highest and it formed discourse.

4.2 Application of rhetorical structure in discourse listening teaching

4.2.1 Category of rhetorical structure

In teaching, we use some illustration of rhetorical structure in discourse listening to summarize the 24 chief categories[5]. As follows:

Through the analysis of the listening discourse, it can be seen that there is a relationship between each sentence and each paragraph. The theory has an advantage of the core function. By grasping the core position of the listening discourse, it can clarify the core idea of the discourse or the author's purpose.

4.2.2 Application in teaching

When listening to the discourse, students are required to pay attention, divide the structure according to the core words of the sentence and the indicated words of the rhetorical structure and analyze the layout of the discourse with the help of diagrams. Some discourses use the same structural relationship again. In teaching, students are required to be familiar with and master the structure and layout of common styles in advance. College English discourse listening is mainly selected from articles of explanatory and argumentative styles in foreign newspapers and publications. Students can understand the structure of these styles, the non-linear, and coherent relationship among them.

As long as students understand the overall structure of the English discourse, they do not have to delve into the meaning of a certain word or phrase. We should also remind the students of the differences between English and their mother tongue and ask them to avoid interference from mother tongue. Generally speaking, English sentences, for example, the main idea and the results are put in the first or main sentence. For Chinese, on the other hand, usually puts the topic sentence, main idea and information at the end of the sentence. Through listening discrimination test, students
are trained to grasp the main line and topic sentence to understand the relationship between each paragraph.

5. Experimental demonstration

5.1 Object

This study selected 120 non-English major students as the object of study. They are in three parallel classes in grade one of automobile service in a university. We called G1, G2 and G3. There are 40 students in each class. According to different research contents, we conducted teaching intervention on G1 and G2 respectively and G3 was carried out in accordance with the traditional listening teaching method, in order to test the effect of the intensified stress and rhetorical structure in discourse listening teaching.

5.2 Hypothesis

Question 1: Did stress and rhetorical structure have a positive impact on the discourse listening English? Question 2: Which is the most effective, stress or rhetorical structure?

5.3 Experimental methods and procedures

This experiment was carried out in students' audio-visual speaking course which is 2 periods every week. Students in G1 received listening training focusing on word stress and sentence stress and they were required to record the stressed they heard and the meanings or answer questions about discourse. Students in G2 were carried out teaching activities focusing on rhetorical structure analysis of listening discourse, record the relationship between discourse frame and sentence and train them to grasp the main points and questions of discourse as a whole. G3 was conducted the traditional way of listening teaching, output and input, listening comprehension, etc.

Before the experiment, all the students in three classes were pretested to make sure that there was no difference in listening level. The whole teaching process is 18 weeks, with a post-test 1 at the end of week 9 and a post-test 2 at the end of week 18. The content of the three tests are CET4 listening comprehension Section C and the method was single choice. In each test, there are 10 questions from 3 discourses with the score of 100 totally.

After experiment, there are three groups of data used for research and analysis: the first group is the existing discourse listening level of all students who participate in the study; The second group is the discourse listening level of three classes after half a semester of teaching intervention. The third group is discourse listening level after teaching intervention for one semester. This study mainly focuses on the performance of three groups of students under three tests and examines the difference of three tests, so as to determine the development of students' listening level. Data analysis mainly includes mean value, significance and so on.

5.4 Results

We analyzed the three groups data from listening tests by variance analysis, the results showed that the students in G1, G2 and G3 groups had the same overall level of English discourse listening before the experiment. There is no significant difference in the level of discourse listening comprehension.

The results in post-test 1 of the three groups showed that the G1 and G2 who received teaching intervention in the first phase had higher mean values than G3 in traditional discourse listening teaching method. The pretest average score of G1 group was higher, but the increasing was not obvious after the two phases of teaching. The mean of G2 group was basically the same as that of G3 group in the pretest, but the mean of G2 group was the highest after the two teaching phases.

As shown below: In addition, to examining the changes of discourse listening level of students in three classes, we conducted the pair sample test analysis. Also we would like to get the difference on effect of stress and rhetoric structure analysis. The analysis was as follows: Pair 1: G1 pretest and G1 post-test 1, the standard deviation was 9.819, \( T=-3.865, P=0.000 \); G1 pretest and G1 post-test 2 was Pair 2 with standard deviation of 16.977, \( T=6.333, P=0.000 \). Pair 3: G2-pre-test and G2 post-test 1, standard deviation is 13.166, \( T=-4.323, P=0.000 \); Pair 4: G2 pretest and G2 post-test 2 standard deviation of 16.469, \( T=-8.353, P=0.000 \). The pairs of G3 pretest and G3 two post-tests also showed significant characteristics.
6. Conclusion

The teaching methods of emphasizing stress and rhetorical structure analysis can promote the improvement of English discourse listening. The experimental data showed that the students' average score of listening was improved 7.158 on the stress teaching. It was increased 3.303 on the rhetorical structural analysis method and 1.335 on the traditional listening teaching method. Therefore, it is more effective to intensify the stress teaching. The listening training with stress can help students to grasp the key points of the listening discourse consciously, make them understand the main meaning as a whole and master the information related to the listening comprehension problem from the details. In teaching, students should cultivate their own listening and reading habits and learn the methods of stress. The teacher could offer them supplementary knowledge and training of higher cognitive listening comprehension strategies, so as to improve their strategic structure and their ability to process listening discourse information.

Reference