

## Research on the Negative Transfer of Minnan Dialect on Students' English Pronunciation at the Suprasegmental Level

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**Abstract:** In China, many students are prone to be influenced by local dialect in the acquisition of second language. The big differences between dialect and second language often interfere students with the acquisition of second language, which is called the negative transfer. Dialect interference not only affects the segmental learning, such as vowels, consonants, but also the suprasegmental learning: stress, rhythm, liaison, assimilation, tone and intonation, and so on. In this paper, the author emphasizes the negative transfer of Minnan Dialect on students' English pronunciation on the suprasegmental level: stress, rhythm, intonation. Finally, the author also briefly introduces some suggestions on English pronunciation teaching.

### 1. Introduction

The famous linguist A.C. Gimson (1989) contends "ESL should know nearly 100% of its phonetics, grammar 50-90% and only vocabulary 1%" (A.C. Gimson 1989:126). Pronunciation is basic and essential. However, the second language acquisition (SLA) does not go smoothly, as a result of the interference from the mother language, which is regarded as 'negative transfer'. According to Webster's Third New World International Dictionary (1986), Transfer, derived from the Latin word "transfere", means "to carry", "to bear" or "to print, impress or otherwise copy (as a drawing or engraved design) from one surface to another". As there are various Chinese dialects in China, many learners often learn native language at birth, to some extent, which inevitably interferes with the process of learning English pronunciation. There is no exception for the Min-nan speaking students, who often speak English with strong Minnan dialect. It is difficult for them to eliminate or reduce its negative effects in the process of learning English pronunciation.

### 2. Theoretical Bases of the Study

#### 2.1 The Phonology of English

The term Phonology is often associated with the study of this 'higher' level of speech organization. Thus phonology is often said to be concerned with the organization of speech within specific languages, or with the systems and patterns of sounds that occur in particular languages (Clark & Yallop, 2000). Phonology is concerned with the sound system of a particular language, so the phonology of one language is very often language specific and should not be applied to another language without discretion (Dai Weidong & He Zhaoxiong, 2002).

The two sub-branches of Phonology: segmental phonology and suprasegmental phonology were first created by American structuralism linguist K. L. Pike in 1942. In phonological systems, segmental phonology contains vowels and consonants, so segmental phonology analyses speech into discrete segments, for example, phonemes. While the units which are larger than segmental phonemes are called suprasegmentals, referring stress, rhythm, tone and intonation, liaison, and so on. Segmental phonology and suprasegmental phonology plays a great important role in analyzing the two different languages. This paper emphasizes in suprasegmental phonology from three perspectives: word stress, liaison.

## 2.2 The Phonology of Minnan Dialect

Minnan dialect was originated from the south of Fujian province, widely covering the south of Fujian, Chaoshan area (Xingan, Lingdong), Taiwan, Singapore... In Chinese linguistics, Minnan dialect is regarded as a Chinese dialect by many linguists. Minnan language is classified into 3 sub-dialects: Quanzhou dialect, Xiamen dialect, Zhangzhou Dialect, among which there are slightly different. Xiamen is located between Quanzhou and Zhangzhou, and Xiamen dialect combines with the features of Quanzhou dialect and Zhangzhou dialect, so Xiamen dialect is the showpiece language in Minnan area. This paper chooses Xiamen dialect as the study subject.

## 3. The research results on the negative transfer of suprasegmental level

### 3.1 Stress

Stress refers to the intensity of the syllable, which is related to the sound intensity, pitch, length, and sound quality. The accent of English is not only a part of the structure of speech, but more importantly, is a part of a word or phrase consisting of the same phoneme with the effect of distinguishing between words meaning or parts of speech. The accent of English can be divided into word stress and sentence stress. Word accent refers to the accent of a single word in English, and cannot be arbitrarily changed, resulting in ambiguity or failing to understand. Such as “export”, when as a noun, it is pronounced [ˈɛkspɔ:t] while the adjectives [ɛksˈpɔ:t], both of which mean selling or transferring abroad. Take “desert” as another example, the pronunciation /ˈdezət/ is used for the noun for the meaning of a large area of land that has very little water and very few plants growing on it. , but the pronunciation /dɪˈzɜ:t/ is used for the verb for the meaning of giving up. It can be seen that accent plays a decisive role in English expression. In Chinese, stress does not affect the meaning of word and the part of speech except for the role of attention or emphasis. Sentence accent refers to the accent that occurs in an English sentence based on the grammar, semantics or psychology, emotional expression. Therefore, sentence accent is generally more flexible than word accent, and the position of the sentence accent should be consistent with that of the words. Sentence stress can be divided into three types: (1) Sense stress. This kind of accent is determined by the part of speech. Generally, the national words expressing the meaning should be stressed, while the functional words should be weakly read. For example, the sentence “I want to buy some apples”, the words of “want, buy, and apples” should be stresses, (2) Logical stress. This type generally depends on the logical relationship of the context with the effect of contrast and emphasis. (3) Emotional stress. It is often related to the psychological factors of the speaker. When a strong feeling is to be expressed, the stress occurs. So this type of accent is the most flexible of the three types of stress. Different people may have different accent positions when expressing the same feelings, even the same person has different emotional accents in different moods.

The author has found in many years of English teaching that there are big problems in the stress of students from Minnan. The problems are as follows: (1) Stress too much. When reading an English sentence, each word is stressed. There is no comparison of light and heavy sounds like speaking Chinese. lacking the key point in a sentence. (2) Students don't know how to use power to accentuate the syllables. Specifically, they don't know how to make accented syllables stand out. Because Chinese accent is often accented by long sounds, students follow the Chinese habits and read the English accent by stretching the sound instead of increasing the pitch, resulting in many words from short vowel to Long one, so that the words meaning has changed. (3) Sentence stress cannot be used. Since there is no related learning about sentence stress in the middle school, when they encounter an English sentence, there is no concept of sentence stress in the brain. They read English sentences completely according to their own wishes, contributing that the words that need to be accented are not stressed while the words that should be accented are missed, which may cause listening problems. (4)The position of stressed syllable are mispronounced ---backward. Because the accent position in Chinese often appears at the end or the back, the students from Minnan often make mistakes unconsciously. If there is no standard recordings, they simply don't know that their accent is misplaced.

### 3.2 Rhythm

The notion of rhythm involves some noticeable event happening at regular intervals of time; one can detect the rhythm of a hear-beat, of a flashing light or of a piece of music (Peter Roach, 2000). Rhythm refers to the pattern of stronger and weaker syllables, in other words, a combination of accented syllables and unstressed syllables, which often occurs an alternation. This is the reason why the English speech sounds more rhythmical. Therefore, there are big differences between Chinese and English in rhythmical structure. Chinese is a syllable-timed rhythm, determined by the number of syllable words. That is to say, the number of words determines the length of time in a sentence. If a sentence consists of a large number of words, it will take more time to read, conversely, the short sentence. For example, The length of time spending in the sentence “我去看电影”(5 words) is shorter than that of “我打算星期天去看电影。”(10 words). However, English is stressed-timed rhythm, indicating that the length of time is determined by the number of stress syllable or stress syllable groups. It also shows that the times from every stressed syllable to the next should be equal, no matter how many unstressed word in the syllable. In many cases, the time spent in a long English sentence is likely to be equal to the time of a short sentence. In the case where the long and short sentence accented syllables are equal to each other, the number of unstressed syllables in the long sentence must be more than the number in the short sentence. In order to maintain the time balance between sentences and sentences, as well as the accent in the sentence, the unstressed syllables in long sentences are read quickly and vaguely, and sometimes even a few soft tones are compressed together to achieve the consistency of time in stress intervals, so the English natives always feel like rushing when they speak. However, English is a language with more unstressed syllables but less stressed syllables, resulting in the other characteristics in connected speech, such as assimilation, elision, and vocalization.

The negative transfer effects in the rhythm of Minnan language are the most obvious. (1) Don't understand the English rhythm. Each word are accented according to the rhythm of Chinese in reading English, giving the impression that it is putting a machine gun, without ups and downs.(2)Don't compress the weaker syllables together and read them quickly and ambiguously. Because in Chinese there are more accents, students are good at reading accent while poor at weak syllables. The techniques of liaison, assimilation, and omission can't be used in speaking English. (3) Besides the features of Chinese rhythm in speaking English, the students from Minnan often prolong the length of time of long vowel and double vowels after consonant, for example [ɑ:] in [dɑ:k], [əʊ] in [təʊn].

### 3.3 Intonation

Intonation is a fundamental property of spoken language. The definition of intonation refers to the prosodic or melodic movement patterns that the speakers of a language use in uttering sentences (Dauer, 1993; Wells, 2006). In this respect, intonation may also be understood as the pitch movements that convey different meanings found at the sentence level (O'Connor & Arnold, 1976; Cruttenden, 1986; Ladd, 1996; Wells, 2006).Therefore, Intonation is called a tune, which refers to the ups and downs of sound in a coherent discourse. English is an intonation language. There is no fixed tone in a word. The tone can change but not distinguish the meaning of the word. While Chinese is a tone language, which can differentiate the words meaning with fixed tones in each syllable, for example, bā(吧),bá(拔),bǎ(把),bà(爸). Chinese has both the tone of the word and the tone of the sentence. The factors that restrict the change of Chinese pitch and the fundamental frequency (the lowest frequency in the composite wave) are firstly the tone, followed by the tone. The tone change of the English pitch and the fundamental frequency mode structure is the intonation, followed by the accent, which is only slightly constrained by stress (Wang Guizhen, cited in Gao Yuan, 2002: 121). The English intonation is not limited by the tone, raising and lowering greatly. While the tone of the Chinese language is limited by the tone with the relatively flat ups and downs. There are five basic patterns in the English intonation: falling, rising, falling-rising, rising-falling, and flat to indicate different meanings.

There are seven tone pitches in Minnan dialect, but the intonation is relatively straight. The

problems are as follows: (1) Lack fluctuation. When some students from Minnan speak English, their tone is often flat and falling too much. They are not good at using the pitch mode in descending order, but to equalize or substantially equalize each of the accented syllables to read a group of tones. (2) Badly master different kinds of English intonation. When they speak English to express their feeling and attitude, they always replace certain types of intonation in Minnan dialect with from that of English. For example, as we know the high level in English, which has a low success rate, is just to express excitement, inquire a special incident or answer an uncommon question, so the students are used to raising intonation in a longer phrases or sense group in order to make the words in a higher tone line, because the tone pitch 55 in Chinese is equal to the high level in English, making their intonation awkward for English natives. While if the tone and intonation between Minnan dialect and English is equal, there would be no change in their modified tone. In contrast, it is easy to make wrong pronunciation, for example, the intonations of “peace” and “aggression” in the sentence “Love peace, oppose aggression” are rising and falling respectively according to the English intonation rules, which is the same as the Minnan dialect, while the intonations of “peace” and “aggression” in the sentence “oppose aggression, love peace,” is different from that of Minnan dialect, so it is often to make mistakes in the second sentence for them. (3) Badly pronounce the short vowel in English. The short vowel in English and the Chinese entering tone are similar, while there is no entering tone in Minnan dialect, so it is difficult for Minnan students to pronounce the short vowels.

#### **4. Suggestions on English Teaching**

##### **4.1 Stress Teaching**

The students should not only understand the characteristics of stress and the general rules on the allocation of stressed and unstressed syllables, but also record the stressed patterns of words one by one in language practice. Attention should also be paid to the use of weak pronunciation in coherent language flow, and the techniques such as assimilation, elision and liaison.

##### **4.2 Rhythm Teaching**

The best method in rhythm teaching is to beat time, a beat for a rhythm group. The intervals between stressed syllables in coherent discourse are roughly equal. That is, stress tends to repeat regularly. First, numbering in English is the simplest rhythm exercise. Second, read some children’s rhythms. Next, read some poems with strong charm and prose. In practical English teaching, teachers can beat time on the Table with their fingers according to the rhythm of the sentence, and let students read the sentence with the rhythm of the teacher.

##### **4.3 Intonation Teaching**

First of all, the students should understand the meaning and usage of various tones in English. Only on this basis can they choose the appropriate tones according to the thoughts and feelings expressed in the discourse. When reading and speaking English, no matter which tone is used, it should be in accordance with the basic pattern of pitch change of tone group, descending in turn from high to low. Especially in the rising tone, we should pay more attention to the pronunciation of unstressed syllables at the end of a word, so as to prevent to read too much or too loudly. As long as the students combine the intonation theory with the practice of oral training, that is to say, they can learn to communicate effectively with appropriate intonation by following the language learning rule of “practice-theory-practice”.

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