

Original Research Article

On Chinese Students' English Pronunciation Problems and Countermeasures

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Abstract: Phonetic learning is the foundation of foreign language study and it is critical for the development of foreign language proficiency. Many Chinese students have a poor command of English pronunciation, which often results in unintelligibility and even misunderstanding in cross-cultural communication. This paper will explore Chinese students' pronunciation problems from segmental perspective and suprasegmental perspective, and propose effective countermeasures to cope with the problems.

Keywords: Phonetic learning; Chinese students; English pronunciation problems; Countermeasures

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1. Introduction

Professor Firth once said without speech sounds, it is impossible to develop the vocabulary system of a language, let alone its syntax system and grammar system^[1]. Therefore, the speech sound is the basis of a language, which indicates that phonetic learning is the basis of foreign language study and it plays a decisive role in developing language proficiency. Many Chinese students are often influenced by negative language transfer and thus have difficulty in mastering English pronunciation because English and Chinese are quite different languages, with the former belonging to Indo-European language family and the latter belonging to Sino-Tibetan language family. In cross-cultural communication, pronunciation problems often lead to unintelligibility and even misunderstanding, therefore it is highly necessary to explore Chinese students' pronunciation problems and seek for countermeasures to improve the situation. This paper will discuss the pronunciation problems the Chinese students have from two perspectives; segmental perspective and suprasegmental perspective, and propose some countermeasures to help them to deal with the problems and improve their pronunciation.

2. Chinese Students' English Pronunciation Problems at Segmental Level 2.1 Problems in Pronouncing Vowels

2.1.1 Monophthongs

In Chinese, there are no [e], [x], and [x]. Students can not distinguish [e] and [x] because these two vowels sound similar to them. They are not accustomed to opening their mouth widely, so they substitute [e] for [æ] more often than not, for example, bad is always pronounced as bed. A large number of Chinese students think $\lceil \Lambda \rceil$ in English is very similar to $\lceil \alpha \cdot \rceil$ in Chinese, they believe the only distinction between these two is just length, so they tend to use a short [a:] to replace [A]. For instance, when they say mother, it often sounds like ['maðə], and likewise, love sounds like [lav]. Chinese vowels are generally lax vowels, so Chinese students have no consciousness about tense vowels and lax and tense pairs, which leads to the fact that Chinese students habitually pronounce the tense vowels as lax vowels. For example, beat sounds like bit, peak sounds like pick, and sheep sounds like ship.

2.1.2 Diphthongs

There are diphthongs in Chinese, such as [ai], [ei], [ao], [ou], [ia], [ie], [uo], [uo], [ue] and etc. but they are different from English diphthongs in pronunciation. Chinese diphthongs are divided into two types in terms of pronunciation. One type is called front sound diphthong and the other type is called back sound diphthong. The first monophthong is stressed and sounds louder than the second monophthong when a front sound diphthong is pronounced. In contrast, the second monophthong is stressed and sounds louder than the first monophthong when a back sound diphthong is pronounced. The process of gliding is very quick between the first monophthong and the second monophthong. Compared with Chinese diphthongs, English diphthongs are mainly front sound diphthongs[3], with the first monophthong sounding louder than the second monophthong. In addition, the pronunciation of the English diphthongs has a more obvious process of glide from the first monophthong to the second monophthong in terms of length, degree, and shape and width of mouth. Because of the great influence of mother tongue, Chinese students often unconsciously adopt their Chinese pronunciation habits to pronounce English diphthongs. Consequently, the diphthongs voiced by Chinese students sound a little strange to English native speakers.

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2.2 Problems in Pronouncing Consonants

2.2.1 Liquids—[l] [r]

English liquids [I] and [r] can find counterparts [I] and [r] in Chinese, but they are not one hundred percent the same. English [I] has two allophones, including a light [I] and a dark [I] [I]. The former is before a vowel and the latter is after a vowel. Chinese only has a light [I], therefore students universally have problems with dark [I]. When pronouncing a dark [I], it is often the case that Chinese students generally choose to omit it or pronounce it as [r]. In some areas in China, such as Sichuan, Guizhou, people do not distinguish [n] and [I] in their local dialects. As a result, students coming from those areas have difficulty in pronouncing [I] sound and they pronounce [I] as [n] almost without exception, for example, *knife* [naif] is pronounced as life [laif]. When it comes to Chinese [r], Chinese students curl their tongue and let the tongue come very near the palate, then the air comes out through the gap between the tongue and the palate and sounds similar to [ri]. Many Chinese students believe Chinese [r] and English [r] are nearly same, so they normally substitute Chinese [r] (actually [ri]) for English [r].

2.2.2 Dentals—[θ] [ð]

Th is pronounced as $[\theta]$ or $[\delta]$ in English. Chinese does not have the two sounds at all^[2]. For lots of Chinese students, the pronunciation of the two sounds is very similar to that of [s] and [z] which can find similar counterparts in Chinese pronunciation system. It costs less effort and is easier to pronounce the alveolars, so many students usually produce [s] and [z] to replace $[\theta]$ and $[\delta]$. For example, think is voiced as sink [sink] and brother is voiced as [bnaze].

2.2.3 Labiodental—[v]

There is no [v] sound in Chinese^[2], so Chinese students usually confuse [v] with [w]. They are not conscious of the difference between these two sounds and unconsciously use [w] to replace [v], with very well ['weri] [wel] as a typical example and sometimes they use [v] to replace [w], with waist [veist] as a typical example. The wrong pronunciation does not lead to meaning difference to some degree, but it sounds very strange and makes listeners feel uncomfortable. It is very difficult for the students to get rid of the wrong pronunciation because they need to spend a large amount of time and practice to fix the correct position of pronouncing the sounds that do not exist in their mother tongue.

2.2.4 Stops—[p] [b] [t] [d] [k] [g]

Although both English and Chinese have stops, their pronunciations are not exactly the same, which result in the fact that a lot of Chinese students pronounce the English stops in a wrong way. In English, stops go in contrast pairs, with one voiceless and aspirated and the other voiced and unaspirated and the other voiced and unaspirated stops are also in contrast pairs, they are distinguished only by aspiration because all the stops are voiceless. Like English, [p], [t], [k] are aspirated and [b], [d], [g] are unaspirated. Influenced by the difference, Chinese students pronounce English voiced and aspirated stops as Chinese voiceless and aspirated stops. Another distinction between English stops and Chinese stops is that the former can be the last sound of a syllable, whereas the latter can not. In a casual speech, English native speakers usually do not release the air at the end of the stop sounds, for example, in the sentence "I tried a knot", we can feel a stop of air but can not hear a "t" sound clearly. However, many Chinese students do not form the habit of holding the final stops, instead they speak out a clear stop sound in this case and some of them even add a [ə] sound after the stop.

3. Chinese Students' English Pronunciation Problems at Suprasegmental Level 3.1 Problems in Pronouncing Word Stress

In English there are monosyllable words, disyllabic words or polysyllable words, so English words have primary stress, secondary stress and even tertiary stress and the rest syllables get no stress and sound weak. However, in Chinese, every word has only one syllable and gets stress. Due to the difference, a lot of Chinese students, especially the beginners tend to stress every syllable of the English words, for instance, hundred is pronounced as ['hʌn'drəd] and beautiful is pronounced as ['bju:'tɪfl]. In addition, many Chinese students often ignore the difference between stressed vowels and unstressed vowels in words. Consequently they fail to pronounce the vowels in the stressed syllable as full vowels and the vowels in the unstressed syllables as schewa although they may pronounce individual vowels well. Sometimes word stress alternation will lead to the change of part of speech, for instance, record is a verb with its stress on the second syllable whereas record is a noun with its stress on the first syllable. This stress alternation may be confusing to some Chinese students because Chinese use tones to distinguish words instead of stress. Consequently, they often make mistakes in pronouncing the words which have two different stress patterns.

3.2 Problems in Pronouncing Sentence Stress

Besides word stress, many Chinese students also have serious problems with sentence stress. To be specific, they tend to stress each word or stress words at will when speaking English sentences under the influence of Chinese. It is obvious that they are not equipped with rules of sentence stress and do not have sufficient practice in their learning process. In fact, English is a rhythmic language. Native speakers usually stress the content words and put the strongest stress on the focus words when they speak and they change their stress according to the emphasis of purposes and conversations. The behavior of stressing every word or any word without a clear purpose will ruin the rhythm of English and thereby cause unintelligibility and misunderstanding in communication.

3.3 Problems in Pronouncing Rhythm

The rhythm of English is created by stressing and de-stressing^[4]. When talking, native speakers say the content words longer, louder and higher in pitch while they say the function words quicker, shorter and relaxedly, for example, in the sentence "I found a dollar in my pocket." native speakers usually stress found, dollar and pocket, the three content words, with pocket getting the strongest stress because of its status as the focus word, and at the same time they de-stress I, a, in, my, the function words. But compared with the native speakers, most Chinese students seem to lack a clear idea about the rhythm of English and speak without a comfortable rhythm. For instance, they will give equal stress to I, found, a, dollar, in, my, pocket, every word of the sentence "I found a dollar in

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my pocket". Their poor mastery of stressing and de-stressing of English words in sentences always to leads to many problems in real communication. In spoken language, in order to make the speech more fluent, native speakers always adopt pronunciation skills such as linking, assimilation, simplification and etc^[4]. However, Chinese students are very weak in this aspect which may be due to the fact that Chinese teachers themselves do not receive enough training in linking, assimilation, and simplification which do not exist in Chinese, thus they pay little attention to teaching these pronunciation skills to their students. At present, a lot of Chinese students do not form the habit of linking consonants with the vowel in daily conversation. The majority of Chinese students do not know linking also happens between vowels. They fail to insert the vowel [w] or [j] between vowels. For example, native speakers will insert [w] between "to" and "own" and [j] between "see" and "it" when speaking "I'd like to own a car." and "I can't see it." while Chinese students will just say two words, "to" and "own", "see" and "it" one by one with clear division when speaking the two sentences.

3.4 Problems in Pronouncing Intonation

Intonation plays a significant role in English pronunciation. Chinese teachers think English intonation is easy and usually teach their students the basic English intonation patterns: native speakers use falling intonation when they say statements and whquestions, use rising intonation when they say yes-no questions, and use rising and falling intonation when they say choice questions. Consequently, Chinese students can use the basic intonation patterns well but they frequently make mistakes and misunderstand the foreigners in daily conversation. Why? In real conversations, native speakers make a flexible use of their intonation and pitch to express different meanings, to be specific, every sentence can convey different meanings with different intonations and pitches^[4]. For instance, the sentence "It is not finished." can be changed by intonation variation. A native speaker just presents a simple statement when using a falling intonation and giving the highest pitch to "fi" as in "It is not finished. "He shows surprise or question when using a rising intonation and giving the highest pitch to "fi" as in "It is not finished. "Uhe displays exclamation and strong emotion when using a rising and falling intonation and giving the highest pitch to "not fi" as in "It is not finished. "Uhe to the lack of the knowledge about the intonation variation, sometimes Chinese students have no intonation consciousness and have some difficulty in expressing their thoughts with proper intonation. It is necessary for the teacher to guide students to learn more knowledge about intonation.

4. Countermeasures to Improve Students' Pronunciation

4.1 Teaching Complete and Systematic Pronunciation Knowledge

In China Chinese students mainly learn English pronunciation in English classes. Although they learn English from third grade in primary school, they just learn basic pronunciation rules. Currently teachers still focus on the vocabulary, grammar, reading and writing though listening and speaking are included in classes due to the fact that very important examinations like high school entrance examination and college entrance examination just measure students' English listening ability by questions of multiple choice and they do not evaluate speaking at all. Consequently, students are not equipped with systematic pronunciation knowledge and provided sufficient training in English pronunciation. On the whole, Chinese students have weak consciousness about English pronunciation and frequently speak English in the way they speak Chinese, which result in serious pronunciation problems. With the pronunciation problems building up, communication problems will definitely increase because speakers need to rely on pronunciation to catch the meaning. Thus it is highly necessary for Chinese teachers to teach students English pronunciation in a systematic way and also help them to get enough and effective practice. Complete and systematic English pronunciation knowledge includes pronunciation knowledge at segmental level and pronunciation knowledge at suprasegmental level as well. The former includes vowel pronunciation rules and consonant pronunciation rules and the latter involves word stress rules, sentence stress rules, rhythm rules, and intonation rules.

4.2 Inputting Authentic Listening Materials

Knowing the pronunciation rules is far from enough for Chinese students to master the English pronunciation. The students need to be exposed to a large number of authentic listening materials to get familiar with, adapt to, distinguish and understand English speech sound, stress, rhythm and intonation. Teachers should carefully select suitable authentic listening materials for their students. When choosing the materials, teachers should take into consideration many factors such as students' proficiency level, English ability, acceptability ability, interest, major, age, gender and so on. Teachers should gradually increase the speed and difficulty of the input listening materials. When listening, students should be given some tasks to train their pronunciation and teachers should correct the students' problems and mistakes in time.

4.3 Comparing Chinese Pronunciation with English Pronunciation

When learning English, Chinese students are always strongly influenced by their mother tongue and tend to speak English in the way they speak Chinese. It is highly necessary for the teachers to compare the similarities and differences between the two languages so that the students will have a comprehensive and clear understanding about English pronunciation and use correct speech organs and articulation manner to produce natural, fluent and connected speech. The comparison should be conducted from segmental level to suprasegmental level. Teachers should give priority to the English speech sounds and pronunciation features which do not exist in Chinese and the sounds and features which students are easily puzzled with.

4.4 Offering Sufficient Pronunciation Practice

4.4.1 Minimal Pair Practice

Providing enough minimal pair practice can help students to handle their perception problems with some consonants and vowels and thus improve their English pronunciation. A minimal pair is a pair of words which differ only in the two sounds being focused on^[5]. "bet" and "pet" are a minimal pair which contrasts "p" and "b" and "fast" and "vast" are also a minimal pair which contrasts "f" and "v". Many pairs of consonants that will cause perception problems are pairs that differ in voicing. In addition, several pairs of vowels that will lead to perception problems differ in that one is monophthong and the other is diphthong. Five diphthongs which easily result in distinction problems are [ai], [au], [oi], [ei] and [ou]. English learners may have trouble in distinguishing two of these

diphthongs (for instance [əu] from [au]), and a diphthong from a monophthong (for instance [ə] in law from [əu] in low), or hearing the difference between two monophthongs (for instance [i] it from [e] bet). The minimal pair practice can be conducted like this: the students are asked to listen and choose the word they hear, and check the answer. The teacher makes an explanation if necessary and then the students listen again.

4.4.2 Rhythmic Fill-in-the-blank Exercise

Rhythmic fill-in-the-blank exercises contribute to improving students' consciousness of English rhythm and help them to master English rhythm^[5]. The teacher presents a metrical material which blanks out a word or phrase to the students. The teacher gives an indication of the stress pattern, and gives a choice of three to four items, all of which fit the meaning of the line, but only one of which fits the required stress pattern. Here is an example: A: Dinner is ready. Come and get it. B: What's for dinner? A: Chicken curry. B: What's for Pudding? A: O O O O. (apple crumble/strawberry tart/lemon pie). A more difficult task is leaving out the stress pattern clue and asks the learners to figure out from the rhythms of the lines which pattern is needed and then which words fit the pattern. Alternatively, we can blank out a word or phrase or even an entire line, provide no alternatives and leave it to the students to think up something appropriate that fits the meaning and the stress pattern. Here is an example: A: This is the furniture! B: Isn't it terrible? A: What shall we do with it? B: ________ (possible completion: Give it to somebody!)

4.4.3 Listen and Imitate

Listen and imitate is another very wonderful way to fully develop the students' English pronunciation. The teacher chooses a listening material according to the students' proficiency level, and asks the students to listen, imitate and record their imitation. Then the students submit their recording to the teacher and the teacher points out the pronunciation problems that the students have. Meanwhile, the students can also compare their recordings with the listening material they listen to in order to find out their own problems and remind themselves of the correct way of English pronunciation. It is suggested that the students listen and imitate again after all of their problems are pointed out. Students can definitely improve their English pronunciation at both segmental level and suprasegmental level after repeated imitation because they know their problems very clearly with the teachers' guidance and their own comparison.

4.5 Providing More Teacher Training

Students' English pronunciation is heavily influenced by the teacher, especially their first English teacher because they receive direct instruction and guidance from their teacher. If a teacher has good English pronunciation, his/her students will benefit from it and are very likely to master English pronunciation well. If a teacher has bad English pronunciation, his/her students will get wrong instruction and are very likely to develop poor pronunciation which is difficult to be corrected in the future. Because of the unbalanced education resources across the regions of China, many English teachers in rural areas are not English majors and didn't study English phonetics course and receive systematic English pronunciation training and thus do not have good English pronunciation, which lead to the fact that these teachers transmit their bad pronunciation to their students. In order to improve the situation, training teachers in pronunciation is a necessity because it can avoid students' bad English pronunciation from the source^[2]. National Ministry of Education should make more investment in teacher training so that the teachers can get more opportunities to learn the theories about English pronunciation and receive proper training to correct their English pronunciation problems.

5. Conclusion

Influenced by the mother tongue, a large number of Chinese students have many pronunciation problems which exist at both segmental level and suprasegmental level. At segmental level, Chinese students make many mistakes in producing those vowels and consonants which do not exist in Chinese or sound similar to Chinese speech sounds. At suprasegmental level, many Chinese students stress every syllable and every word, and they have poor consciousness of English rhythm and intonation and tend to speak English in the way they speak Chinese. In the process of teaching English pronunciation, the teacher should teach their students complete and systematic pronunciation knowledge, guide the students to listen to a large number of authentic listening materials, compare Chinese pronunciation with English pronunciation and make a clear explanation to the students. After learning systematic knowledge about English pronunciation and knowing the similarities and differences between the two languages, the students also need a lot of practice to achieve good English pronunciation. There are many wonderful methods and exercises that the teacher can adopt to train students' English pronunciation, such as minimal pair practice, rhythmic fill-in-the-blank exercises, listen and imitate, and so on. Students' pronunciation is easily affected by their teacher, especially their first teacher. Some Chinese teachers are poor in their pronunciation, so the Ministry of Education should offer more training to the teachers to improve their pronunciation, which will benefit the students. It is believed that students will make improvement in their English pronunciation with enough knowledge, sufficient practice, and proper guidance.

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