A Study on the Influence of Mother Tongue Transfer on English Pronunciation of Primary Students

Yan Xue

Panzhihua, China
Email: wanghaibo004@qq.com

Abstract

It is found that students' English pronunciation is affected by negative transfer of mother tongue at the segmental level and suprasegmental level. At the segmental level, it is mainly manifested in the vacancy of phonemes, the incomplete correspondence of phonemes and the increase of phonemes. At the suprasegmental level, it is mainly reflected in stress, intonation and linking. With the help of the positive transfer of mother tongue, while minimizing the negative transfer, students can master English pronunciation easily, efficiently and accurately.

Keywords

Mother Tongue Transfer, English Pronunciation, Positive Transfer, Negative Transfer

1. Introduction

1.1. Research Background

With the development of social informatization and economic globalization and the further strengthening of foreign exchanges, the communication between countries has become increasingly close, and the importance of English learning has become more and more prominent. Learning a language is inseparable from a certain language environment. No English learning environment is the biggest obstacle for us to learn English. In English learning, it is necessary to build a comprehensive and high-quality English learning environment through multiple channels and form a complete set of English learning environment system, which plays an important role in stimulating children's interest in English learning, cultivating language ability, improving communication ability, improving learning

efficiency and effect, and developing English quality. Obviously, language learning is inseparable from the language environment, which plays a very important role in language learning.

In our country, there is no English learning environment, many students only learn English in the school set English classes, but there are not many English classes a week, students only speak a little English in class, and then speak Chinese after, so students have few opportunities to practice English. And some primary schools do not offer specific English phonetics courses, just teach pupils to learn some simple words and sentences, and some teachers do not care about students' pronunciation, they only care about whether the students can recognize and understand the meaning of the words and they think that knowing the words and knowing the meaning of the words is more important than pronunciation. Some teachers have bad pronunciation, so their students' pronunciation is not good. And when students do not know how to pronounce English words, they will use Chinese homophones instead, which is affected by the negative transfer of the mother tongue, and the pronunciation will become worse and worse in the long run.

1.2. Literature Review

Many scholars in China are aware of the influence of transfer in second language acquisition on the acquisition of phonetics. They make a comparison between Chinese and English phonetics to find out the differences and analyze the transfer in detail. For example, Gui Cankun published an article in 1978, *Comparison of the Main Features of Chinese and English Phonetic Systems*, which compares and studies Chinese and English phonetics from the aspects of phoneme, tone, intonation, rhythm and phonological cohesion. In 1988, Liu Naihua published *A Comparison of the Main Features of Chinese and English Phonetic Systems*, which further deepened and expanded the study of phonetic comparison. After that, He Shanfen makes a further comparative study of English and Chinese phonetics, involving not only the segmental level, but also the suprasegmental level. Such as: *English Suprasegmental Phonemes and Their Discrimination Function* analyzes the discrimination function of English phonetics from the perspective of suprasegmental phonemes and *A Probe into the Phonological Changes of English Non-Speech Flow* focuses on the phonological changes in English speech flow.

In a word, the theory of mother tongue transfer in English teaching has achieved fruitful results. But at the same time, we should study the transfer effect of mother tongue transfer on English pronunciation acquisition. There are still some problems, such as the content and coverage of the current study are still not very wide, it still needs a lot of research space.

According to the theory of mother tongue transfer, in the process of second-language acquisition, students' habits of using their first language (mother tongue) directly affects their second language acquisition, and promotes or interferes with their second language acquisition. According to educational psychol-

ogy, the positive influence of mother tongue on foreign language learning is caused by factors similar to foreign languages, which is called positive transfer and helps students master and use foreign languages. Negative transfer has a negative effect on the learning of a foreign language, since components whose native language is different from a foreign language.

2. Error Analysis at the Segmental Level

2.1. Errors and Analysis of Vowels

The smallest phonetic unit in speech is the phoneme. Chinese divides phonemes into consonants and vowels, while English divides phonemes into consonants and vowels. Pinyin has 24 vowels and 20 vowels in the English phonetic alphabet. According to the results of the questionnaire, pinyin has a positive and negative transfer effect on English vowels (Gui, 1978).

Positive transfer: because some of the vowels in the Pinyin are made up of vowels and consonants, here we only compare the single vowels in the Pinyin with the compound vowels. By comparison, nine vowels (a), (o), (e), (i), (u), (ai), (ei), (ao), (ou) in Pinyin and the nine vowels [ɑː], [ɔː], [ə], [uː], [aɪ], [eɪ], [aʊ], [əʊ] in English, there are obvious similarities in writing, pronunciation and pronunciation position.

Negative transfer: the influence of the Pinyin vowels on English pronunciation is mainly manifested in the negative transfer of the position of the tongue and the mouth shape. The pronunciations of single vowel (a), (o), (e), (i) and (u) in Pinyin are similar to those of English vowels: [ɑː], [ʌ], [ɜː], [ə], [iː], [ɪ], [uː], [u] respectively, but they require a more pronounced change in the position of the tongue, either before or after or at a higher or lower level. There are many students who have negative transfer on the position of tongue on these sounds. The most important vowel sounds in Chinese are concentrated in the front and middle of the mouth, (i), (u), (ü) belong to the front phonation, while (a), (o), (e) belong to the middle. In contrast to the same English vowels, [e] and [ɪ] are in the front. [ɑː], [ɔː] and [uː] are in the back. [e] and [æ] in English has no corresponding pronunciation in Pinyin. So many English learners tend to pronounce [e] and [æ] as the (a) in Pinyin. The identical vowels are easy to grasp due to positive transfer, the similar vowels are difficult due to strong mother tongue influence, and the different vowels are more difficult due to negative transfer (He, 1989).

2.2. The Incomplete Correspondence between Vowels and Diphthongs

There are also some differences between English diphthongs and Chinese compound vowels. The compound vowels in Pinyin are written as two or more characters, but the transition between the characters is not obvious and is more like a sound formed by the fusion of two or more sounds. English diphthongs are composed of two vowels, and the first vowel sound is a smooth transition to the

second vowel sound, which clearly reflects the changing process of the two (He, 1998), such as Diphthong [əʊ], [ɔɪ], [eə], [ɪə], [ʊə] etc. From the first vowel to the second vowel, there is a process of change from strong to weak. Compared with diphthongs, the compound vowels in Chinese are more unitary without a process of sliding and changing. Therefore, the main influence of Pinyin on the negative transfer of English diphthongs is that there is no process of diphthongs changing, because no corresponding similar sounds can be found in the Pinyin, replacing the diphthong [aʊ] in house [ˈhaʊs] with its familiar, simpler sound is a natural sliding process from [a] to [ʊ], in which the mouth shape changes, and the opening and closing of the mouth decreases from large to small. The position of the tongue is raised from low to high and the [a] sound is heavier and clear, while the [ʊ] sound is short and vague. This Chinese pronunciation does not have the [aʊ] sound, so students replace it with a similar (ɔ) sound, which became another word horse (Liu, 1988).

3. Errors and Analysis of Consonant Phonemes

3.1. Adding Syllables

In Chinese, syllables are often made up of initial consonants followed by a vowel. Students are not used to the sound of ending a syllable with a consonant, so they add a vowel sound after a word that ends with a consonant. In other words, when [m], [p], [k], [t] and so on appear at the end of words, students are prone to mispronounce: mu, pu, ke, te and so on. Such as stop [stɒp] to [stɒpʊ], walk [wɔːk] to [wɔːkə], and pig [pɪg] to [pɪgə] and time [taɪm] to [taɪmʊ] and so on, which can not reflect the pronunciation characteristics of clear consonants.

3.2. Incomplete Correspond of Phonemes

It is found that seventeen consonants in English of [p], [b], [t], [d], [k], [g], [f], [s], [ʃ], [h], [tʃ], [dʒ], [m], [n], [l], [j], [w] are similar in place and way of articulation to seventeen consonants in pinyin of (p), (b), (t), (d), (k), (g), (f), (s), (x), (h), (q), (j), (m), (n), (l), (y), (w).

There are some similarities between some consonants in English and some consonants in Pinyin, but they are not identical. This kind of pronunciation is often difficult for students to learn, because students cannot correctly and authentic pronunciation, coupled with the students' Pinyin pronunciation habits. It is easy to make mistakes in pronouncing such sounds. The error is particularly obvious in this [ʃ] sound, where the English consonant [ʃ] is between [Shi] and [Zi] in Mandarin. It is difficult for the students to pronounce the sound.

3.3. Phoneme Vacancy

The air flow from the lungs is blocked or restricted somewhere in the vocal tract, resulting in short or not very loud sounds, only from the auxiliary vowels to form syllables, the edge of the syllable is called consonants. There are some consonants that are not in the Pinyin, such as [θ], [v], [f], [ð], [ʃ], [ʒ] and so on, so

the most common transfer of consonants is that students substitute similar sounds in Chinese (Ni, 2019).

Many students pronounce [θ] as [s], such as "thanks" [θæŋks] becomes [sænks]; pronounce [ʒ] as [r], such as word "usually" ['juːʒʊəliː] becomes ['juːrʊəliː]; pronounce [ʊ] as [w], such as word "very" ['verɪ] becomes ['werɪ], which is often uncomfortable.

In addition, the consonant [l] is pronounced that the front part of the tongue is raised, but the palatal point is closer to the middle vowel region, and its height is at the upper point of the close-mid and lips slightly extended, tongue muscles relaxed, but often the learner pronounces "Little" as "Litto".

The words "word" [wɜːd] and world [wɜːld] are also confused because of the neglect of consonants [l] and when the [l] is at the end of the word, 90% of the students cannot master it. Words like girl, Wall, feel, fall, tell, etc.

When similar sounds cannot be replaced, students often find it more difficult to learn (Su, 2016).

4. Negative Transfer on Stress, Intonation and Liaison

This part mainly tells that the impact of negative transfer of mother tongue on suprasegmental aspects, including stress, intonation and liaison.

4.1. Stress

Students pay little attention to stress or have difficulty in pronouncing English words. Each English word can have two or more syllables. In this case, there are light and heavy syllables. There are stressed and unstressed syllables in English, and stressed syllables have primary and secondary stresses. Chinese is a tone language. According to Chao Yuan Ren's pentatonic system, the tones of Chinese syllables are generally divided into Yin Ping, Yang Ping, Shang Sheng, Qu Sheng and Qing Shen, the first four are what we usually call one, two, three and four (Wu, 2020).

Different tones of Chinese characters have different meanings, such as [yī] 依, [yí] 姨, [yǐ] 倚, [yì] 议, different tones have different meanings. When English stress changes, the part of speech also changes, for example, the word "increase" when the stress is on the first syllable, it is pronounced ['ɪnkriːs]' as a Noun; when the stress is on the second syllable, it is pronounced [ɪn'kriːs] as a verb. There is no such thing as syllable stress in Chinese. In English, sentence stress is often used. Sentence stress is more flexible than word stress and it is mostly used to emphasize emotion, mood and different stress are suitable for different situations.

Influenced by the strong and round Chinese characters and the habit of clear pronunciation, the students will deliberately pursue to read word by word and read each word clearly, which leads to their lack of awareness of stress and the lack of obvious words that need stress, unstressed words and clear pronunciation affect the fluency of sentence expression, difficult to reflect the beauty of English rhythm, and even affect the understanding of sentence meaning (Wang, 2015).

4.2. Intonation

The vast majority of students do not pay attention to the changes in intonation. In English conversation, people express their feelings and intentions through different intonation. Chinese also has intonation, can also express the speaker's emotion color and the intention, but its intonation is more has the rhetoric function. In terms of the components of intonation construction, English intonation and Chinese intonation are both composed of four parts: Diaoguan, Diaotou, Diaohe and Diaowei.

Different tone values and tone types can be used to distinguish word meanings, such as huo (豁，活，火，或). The difference is that English as an intonation language, Chinese as a tone language. English intonation has four basic intonation, and different intonation can express different meanings. First, falling tone. Often used in declarative sentences, judgment sentences, special questions, command sentences, with a positive, clear meaning. Second, rising tone. Used in a yes–no question, phrase, or clause with an unfinished meaning, to express uncertainty, or with an incomplete or incomplete meaning. Third, up and down tone. It is a mixture of rising and falling tones, which can be used to indicate the speaker's attitude, such as hesitancy, reservation, rebuttal, etc. Finally, ascending and descending polyphony. It contains the high-down and low-up intonation cores. High-down transmission of main information, low-up transmission of secondary or auxiliary information. It is often used in compound sentences to express primary and secondary information. In the classification of intonation, English and Chinese have two basic types, rising tone and falling tone.

However, Chinese students are influenced by their mother tongue and are not used to the ups and downs of English intonation (Zhao, 1980).

4.3. Liaison

The linking of words in sentences is also a special phenomenon in English, but Chinese is not generally connected. Conjunction refers to the way in which syllables and syllables, words and words, are connected in a sentence or continuous flow of words. It makes English sound smooth, natural and fluent, and in tune with the rhythm. However, in Chinese, words are relatively independent from each other. The syllable of Putonghua is a complete and hierarchical structure composed of consonants, vowels and tones. Syllables almost always end in a vowel, and the tone varies throughout the pitch, with one syllable corresponding to one tone. This makes the single syllable of Mandarin have a strong closed and cohesive nature, which restricts the linking between the syllables of Mandarin. If they are connected, the meaning of the sentence will be blurred and the hearer's understanding of the meaning of the sentence will be affected. Influenced by their mother tongue, primary students like to read English sentences word by word and often pause, just like counting is not coherent enough, so language lacks fluency and beauty. Due to the influence of the mother tongue, primary students cannot link, and without the guidance of linking rules, they do not know under what circumstances words in a sentence can be linked.

5. Summary

Based on the five chapters conducted on the study of mother tongue transfer, the author explored that pupils' English phonetics learning is influenced by the positive transfer and negative transfer of their mother tongue, the conclusions are as follows:

First, the influence of positive transfer of vowels, consonants and intonations of mother tongue on English pronunciation. Nine vowels (a), (o), (e), (i), (u), (ai), (ei), (ao), (ou) in the Pinyin are similar to the vowels [ɑː], [ɔː], [ə], [uː], [aɪ], [eɪ], [aʊ], [əʊ], and the consonants in English of [p], [b], [t], [d], [k], [g], [f], [s], [ʃ], [h], [tʃ], [dʒ], [m], [n], [l], [j], [w] [r] are similar to the consonants in pinyin of (p), (b), (t), (d), (k), (g), (f), (s), (x), (h), (q), (j), (m), (n), (l), (y), (w). In the classification of intonation, both English and Chinese have two basic types, rising tone and falling tone. Therefore, in learning this related knowledge, primary students' accurate English pronunciation is influenced by the positive transfer of mother tongue.

Second, the accurate pronunciation of the vowels of primary school students is influenced by the negative transfer of the mother tongue, which is embodied in the differences in the position of the vowel in Pinyin and the vowel in English, as well as the mouth shape. (i), (u), (ü) belong to the front phonation, while (a), (o), (e) belong to the middle. In contrast to the same English vowels, [e], [ɪ], is in the front [ɑː], [ɔː], [uː] is in the back. In addition, there is no similar diphthong pronunciation in the initial consonants of Pinyin, the appearance of diphthongs such as [ɪə], [eə], [ʊə], [əʊ], [aʊ] can easily be replaced by a single, simple sound familiar to students. The differences between the above two vowels and vowels will lead to difficulties in students phonological learning.

Third, the accurate pronunciation of the consonants of primary school students is influenced by the negative transfer of the mother tongue, which is embodied in the fact that when [p], [m], [f], [k], [t], [n], [l] such as [l], [n] appear at the end of words, the students tend to lose the pronunciation. When [p], [m], [f], [k], [t], etc., are the final sounds, students tend to say idioms like mu, pu, fu, ke, te and so on in Chinese incorrectly. At the same time, the influence of negative transfer of mother tongue is also reflected in the [θ], [v], [f], [ð], which does not correspond to the initial pronunciation of Pinyin. Students can easily substitute[z], [s] etc. The difference between the above two English consonants and initial consonants in pinyin will lead to students' difficulty in learning pronunciation and inaccurate pronunciation.

Fourth, besides basic pronunciation, students' stress, intonation and linking are also affected by negative transfer of their mother tongue. First of all, based on Chinese pronunciation habits, students rarely pay attention to stress problems, or stress difficulties caused by pronunciation. Secondly, under the influence of Chinese pronunciation, students lack the awareness of linking, and even if they know the phenomenon, it is still difficult to find and pronounce it accurately. Finally, the vast majority of students do not pay attention to intonation

changes, more down-tone, and the lack of flat ups and downs.

Finally, in order to minimize the influence of negative transfer, the teaching strategies are put forward based on the principles of respecting the Development Law of primary school students, paying full attention to individual students, and combining imitation with understanding: teaching methods for phoneme vacancy, teaching methods for incomplete correspondence of phonemes and teaching methods for suprasegmental level.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

Gui, C. K. (1978). A Comparison of the Main Features of Chinese and English Phonetic Systems. *Modern Language, No. 1*, 44-80.

He, S. F. (1989). English Suprasegmental Phonemes and Their Justification Functions. *Journal of Shanghai International Studies University, No. 6*, 6-20.

He, S. F. (1998) A Probe into the Change of English and Chinese Rhyme. *Foreign Languages and Teaching, No. 2*, 14-18.

Liu, N. H. (1988). A Comparison of the Main Features of Chinese and English Phonetic Systems. *Journal of Nanjing Normal University (Social Science Edition), No. 3*, 79-84.

Ni, J. J. (2019). The Negative Transfer of Chinese on English Pronunciation Acquisition and Coping Strategies. *English Teachers, 19*, 22-25.

Su, Y. (2016). Pronunciation Acquisition of English Common Language from the Perspective of Language Transfer. *Journal of Qiqihar Teachers College, No. 5*, 43-45.

Wang, H. (2015). The Influence of Negative Transfer of Mother Tongue on English Pronunciation Learning and Teaching Strategies. *Journal of Henan Radio and TV University, 28*, 73-76.

Wu, Z. Z. (2020). The Negative Transfer of Chinese to English Pronunciation Learning and the Countermeasures of College English Teaching. *Education and Teaching Forum, No. 6*, 224-225.

Zhao, Y. R. (1980). *Language Issues*. Commercial Press.