Contextualizing Local English Pedagogy: Transfer Effects in Northeast Chinese Secondary Students' English Acquisition

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Abstract. In second language acquisition, individuals are under the influence of the phonetic system of their mother tongue. This paper studies the phenomenon of negative phonological transfer in the learning of English among Northeastern Chinese children. This paper mainly uses Praat to determine how common for Junior High school students in Jilin to experience negative transfer in their oral English acquisition. We specified the phonemes susceptible to the negative transfer. In conclusion, we discussed the potential improvements in Jilin areas' English teachers' teaching methods to offset the transfer effects. The analysis intends to assist English teachers in the Jilin Region in taking countermeasures to neutralize the negative transfer effects of Dongbei accents on English education.

Keywords: Dongbei Accents, Secondary school English education, negative transfer, English phonetic acquisition

1 Introduction

Second language acquisition is the process of learning another language after establishing the first language. English is the most common language for learners to acquire in China. Well aware of English's growing significance as the global Lingua Franca, the Chinese government centralized the education system of English in China. English teaching nationwide strictly follows official documents which describe the education's objectives and requirements. The teaching of secondary students subjects to the Standard of English Courses for 9-Year Compulsory Education (for both primary and junior secondary students.) [1].

Oral English acquisition has been an essential goal for English learners, while different dialects can seriously influence English learners' accents with positive and negative transformations [2]. For second language acquisition, language transfer will influence in two aspects, one is positive transfer, which means the relations between the first language and second language will influence second language acquisition positively, and another one is negative transfer, which second language acquisition will be influence negatively because some alternatives have different rules and forms. Broadly

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speaking, the paper examines the first language's role in shaping the phonetics traits of a second language. This research mainly analyzes whether it is common for Junior High school students in Jilin to experience negative transfer in their oral English acquisition.

2 Literature review

2.1 Defining language transfer

In consonance with the hay days of behaviorist linguistics, Robert Lado first raised the term language transfer in 1957. He contends that individuals transfer the forms, meanings, and distributions in their native language to the foreign languages they learn [2]. In the 1950s and early 1960s, the effect of transfer on language learning was widely recognized. During the 60s, emerging linguists contend for human native capacity for all languages acquisition. And studies under the behavioral paradigm were challenged [3].

Scholars continued to research language transfer's effect. The research takes on Odlin's theories (1989): "Transfer is the influence resulting from the similarities and differences between the target language and any other languages that have been previously (and perhaps imperfectly) acquired." [4]. Odlin's definition considers the potential influence of other languages apart from the native tongue, which is in line with strong pieces of evidence.

2.2 Negative transfer of Chinese

Chinese belongs to the Chinese-Tibetan language family, and English belongs to the Indo-European family. Chinese and English differ significantly in all linguistics subsystems, which implies potential transfer effects, including pragmatics and rhetoric, semantics, syntax, morphology, phonology, phonetics, and orthography [5]. Since this paper centers on the phonetic differences between Chinese and English, we only explicate the differences in the phones and phonemes of the two languages.

In recent 20 years, a large quantity of research has been implemented in search of the phenomena and rules of transfer in English acquisition [6], the study and application of language transfer theory, the research and exploration of positive transfer, the elimination of negative transfer, the contrast between English and Chinese, the study of influencing factors, and so on [7]. Research shows that Chinese negative transfer is one of the major causes of poor performance in English learning. Consequently, to become more successful in second language acquisition, learners are bound to know more about Chinese negative transfer to English learning.

2.3 Negative transfer of Dongbei dialect

Dongbei dialect derives from the Shandong dialect and Hebei dialect. Xihui corroborates that the Dongbei dialect borrows words from the Manchu language and Russian and possibly the language of other ethnic minorities that have lived near. Dongbei

dialect is characteristic, including spontaneous mixings between stops and fricative sounds and confusion about Blade-alveolars and Retroflexes [8], which means that learners in the Dongbei area are more likely to be influenced by the Dongbei dialect than by standard Chinese when learning oral English. Yutong Wu narrows down the scope of possible phonemes that go through significant negative transfer [9]. Meanwhile, Wang Yuting evidenced and quantified the negative transfers of vowels [10]. In this research, we analyzed 50 Dongbei students' recordings and determined the influence of the Dongbei dialect on oral English, particularly consonants. The research aims to provide a reference for learners that study English as a second language (ESL) and English teachers according to the influence of Dongbei dialect on ESL learners [11].

To ensure that the paper spots every mispronounced sound, we compared our analysis with a standard reference frame to see if the tongue position relationship was consistent.

3 Research design and implementation

Our research participants are mainly learners from Jilin province who use English as their second language. All these participants are from a junior high school called The Seventh Middle school in Jilin. We collected 60 pieces of audio data and analyzed 30 pieces of valid audio data during collecting recordings. The primary analysis software we used is Praat. Praat is a cross-platform multifunctional professional language software [12]. The critical function is to analyze and process audio, add annotations to the data and research-related items, synthesize digitized speech signals, and generate various language charts and text reports. The text that prioritized the hypothesized consonants is as follows:

"Tracy from China went to the zoo and saw a zebra.
She will draw a picture of chickens in a cage.
Jason is searching for his toothbrush.
Zoey said she once saw a white dragon. That is not true because dragons aren't real.
When did Andy finish his homework?"

4 Research data analysis and discussion

4.1 The analysis of consonant /tr/

The contexts we use to analyze/tr/ are 'Tracy' in the sentence 'Tracy from China went to the zoo and saw a zebra.' and 'true' in the sentence 'that's not true because dragons aren't real.'

Hypothesis: the symbol of "ch" in Chinese would negatively transfer the pronunciation of /tr/ in English.

/tr/ is an independent affricate consonant. /tr/ is pronounced with the tip of the tongue against the back of the gum, while ch is pronounced with the tip of the tongue near the front of the hard palate. The place of the tongue is entirely different.

The most common mistake is that speakers replace /tr/ with "ch." According to our collection, 21 participants pronounced ‘Tracy’ correctly, and 9 participants mispronounced. Only 15/30 participants pronounced it correctly for ' true, ' while the rest pronounced "chu" instead.

4.2 The analysis of consonant /dr/

The contexts we use to analyze/dr/ are 'draw' in the sentence 'She will draw a picture of chickens in a cage.' and 'dragon' in the sentence 'Zoey said she once saw a white dragon.'.

Hypothesis: the symbol of "zh" in Chinese would bring negative language transfer on the pronunciation of /dr/ in English.

/dr/ is also an independent affricate consonant. Since the place of the tongue is different, participants may pronounce 'zhao' rather than 'draw.'

According to our collection, 28 participants pronounced 'draw' correctly, and 2 participants mispronounced. The most common mistake that participants tend to pronounce is 'traw' rather than 'draw.' For 'dragon,' there are 25 participants pronounced correctly, and 5 participants mispronounced. The most common mistake that participants tend to pronounce is 'zhogon' rather than 'dragon.' However, only 2 participants mispronounced the word 'draw,' and 5 participants pronounced 'dragon' wrongly. This data is insufficient to support our hypothesis that the pronunciation of "zh" would bring negative language transfer on the pronunciation of /dr/ in English.

4.3 The analysis of consonant / ʃ/ and /s/

The contexts that we use to analyze / ʃ / and /s/ are 'searching,' and ‘toothbrush’ in the sentence ‘Jason is searching for his toothbrush.’. The most distinctive feature of the northeast dialect is to distinguish between the flat tongue and retroflex. In English, the consonant of / ʃ/ is similar to “sh,” while the mouth shape and tongue position is different when pronounced.

Hypothesis: the symbol of sh and s in Chinese would negatively affect the pronunciation of / ʃ / and /s/ in English.

According to our collection, 25 participants pronounced 'searching' correctly, and 5 participants mispronounced it. The most common mistake that participants tend to pronounce is 'thearching’ and ‘shearching'. For 'toothbrush,' there are 28 participants pronounced correctly, 2 participants tend to pronounce 'toothbrus' rather than 'toothbrush.' In this case, it could conclude that the symbol of sh and s in Chinese would influence the pronunciation of / / ʃ / and /s/ in English negatively to a certain extent.

4.4 The analysis of consonant /θ/

The pronunciation of voiceless consonant /θ/ does not exist in the phonetic system of Chinese. Therefore, it is the most frequently mispronounced consonant. For example, English learners tend to pronounce /ˈsɪəri/ instead of /ˈθɪəri/. The context we use to analyze/θ/ is 'toothbrush' in the sentence 'Jason is searching for his toothbrush.'

Hypothesis: the symbol of s in Chinese would negatively transfer the pronunciation of /θ/.

According to our collection, 24 participants pronounce correctly, and 6 participants pronounce incorrectly. The most common mistake that participants tend to pronounce is 'tooshbrush' and 'toosbrush.' Based on the data, we could conclude that the symbol of s and sh would negatively affect the pronunciation of /θ/ for English learners to a certain extent. However, it could argue that the word 'toothbrush' is a complex word, which brings difficulty for English learners to pronounce.

4.5 The analysis of consonant /z/

The pronunciation of /z/ does not exist in the phonetic system of Chinese. Thus, English learners find it hard to differentiate between /ʦ/ and /z/.

18 out of 30 participants pronounced "zoo" as /tsu/, and five errored similarly on "zebra."

4.6 The analysis of consonant /w/

The pronunciation of /v/ does not exist in the phonetic system of Chinese. Thus, English learners find it hard to differentiate voiced /v/ and the voiceless /w/. /v/ is a sounded labiodental approximant semivowel. When pronouncing /v/, the speaker slightly retracts the lower lip, but keeping the mouth open and never touching the front upper teeth with the lower lip. The lips are initially rounded and protruding forward, then relaxed to their natural position when the speaker pronounces /w/.

There are five occurrences of the sound /w/ pronounced, respectively, at the beginning of "went," "will," "once," "white," "when," and "homework." Careful examination yields a widely different rate of erroring. Eight among 30 pronounced "went" as "vent". 13 pronounced the /w/ in "will" wrong. It's worth mentioning that among 10 participants that pronounced the /ə/ in "will" as /i:/, 7 pronounced /w/ wrong, indicating a correlation between mispronouncing /ə/ as close, front /i/ and pronouncing /w/ as /v/. 2 pronounced "once" wrong, 1 pronounced "white" wrong, 2 pronounced "when" wrong, and none pronounced /w/ in homework wrong.

Negative transfer is significant for the sound /w/. However, we found few clues in search of the root cause of different words' varied mispronunciation rate since the number of errors in went and when is mismatched.

5 Conclusion

In this research, we have analysis 6 pronunciations in total, which are /tr/, /dr/, / ʃ/ and /s/, /θ/, /z/ and /w/. Our research concludes that / ʃ/ and /s/, /θ/, and /w/ would be influenced negatively by the symbol of s, sh, and v in Chinese. Apart from pronunciation negative transfer, we found that the participants speak faster than the normal speaking speed. This situation may be because the speaking speed of the Dongbei dialect tends to be faster than Putonghua, which brings a negative language transfer on oral English

acquisition. There are several suggestions for English learners to avoid this negative language transfer. Firstly, most of our participants learn English from their schoolteachers, which means teachers' accents could heavily influence students' pronunciation. Therefore, it is essential to improve schoolteachers' pronunciation. Secondly, English learners could listen to English broadcasts and imitate and practice with the broadcast [13]. Besides, English learners should focus on the quality of pronunciation rather than the quantity. Thus, we believe English learners will have a qualitative leap.

References

1. He, Deyuan. "University students' and teachers' perceptions of China English and world Englishes: Language attitudes and pedagogic implications." The Asian Journal of Applied Linguistics 2.2 (2015): 65-76.
2. Lado R. Linguistics Across Culture [M]. Michigan: University of Michigan Press, 1957.
3. Wang, Ruige, and Xiaoxia Xiang. "On the function of mother tongue transfer in English vocabulary acquisition." Theory and Practice in Language Studies 6.11 (2016): 2208.
4. Odlin, T. 1989: Language Transfer. Cambridge: Cambridge University Press
5. Odlin, T. 1989: Language Transfer. Cambridge: Cambridge University Press
6. Low, Ee-Ling. Pronunciation for English as an international language: From research to practice. Routledge, 2014.
7. Chen, X. (2019, April). Negative Transfer of Hakka in Gan Dialect to English Phonetic Acquisition and Its Countermeasures. In 3rd International Conference on Culture, Education and Economic Development of Modern Society (ICCESE 2019) (pp. 200-203). Atlantis Press.
8. Huang Xihui. Manchu influence in Northeast Chinese dialects [J]. Language Studies, 1997(04):58-63.
9. Yutong Wu NONG JIA CAN MOU. Liaoning University of International Business, 2020.
10. WANG Yuting. The influence of Northeastern dialects on ESL learners' English phonological acquisition and coping strategies[J]. English Abroad, 2020(14):102-104.
11. Zhu Yumin. The influence of Chinese language environment on English learning [J]. Education Modernization ,2018(25):226-227+229.
12. Boersma, P. (2011). Praat: doing phonetics by computer [Computer program]. http://www.praat. org/.
13. Siqi, Li, and Andrew Sewell. "Phonological features of China English." Asian Englishes 15.2 (2012): 80-101.