

The Influence of Shandong Dialect on English Learning

Wang Yi^{1,a,*}

¹Hebei Oriental College, Langfang, Hebei, 065000, China

a. 1329861777@qq.com

*corresponding author

Abstract: Phonology—the material shell of language—has its own peculiarities because language structures and realizations vary. Behaviorist phonological theory implies that prior phonological patterns interfere with second-language communication. Learners inadvertently transfer their native language pronunciation to foreign language acquisition. The transfer is a psychological phrase that used to refer primarily to the influence of former learning on subsequent learning but now refers to the influence of one type of learning on another. Positive and negative transfers exist. English is Indo-European, while Chinese is Sino-Tibetan. distinct language families mean distinct phonological intonation systems and pronunciation patterns, therefore negative transfer of phonological learning is inevitable. Chinese students learn various dialects, each with its own system, and these dialects deeply affect English phonological intonation learning. This paper examines the transfer effect of the Shandong dialect on English phonology and the negative transfer of dialects to English intonation learning. The phonological system differs in terms of consonant parts and pronunciation methods, and the intonation system differs in tone, intonation, stress, and rhythm.

Keywords: Shandong dialect, English, phonological intonation, migration

1. Introduction

Language-specific phonetics and pronunciation. Beginners typically pronounce other languages like their home tongue. “The pronunciation system of a language is based on a particular set of actions that the articulatory organs are accustomed to,” said Wen X and Jia Y. The pronunciation base is simply a condensed expression of the physiological aspects of speech in each language, but it illustrates the major importance of social properties and their relationship to physiological and physical properties. The source language’s phonetics give foreign language learners an “accent.” Native phonetic base interferes.” [1] To memorize a foreign language, learners may substitute their own language or local dialect for the foreign language sound, however, this makes them pronounce it incorrectly. Both languages have distinct phonologies. Chinese learners transfer English phonetics. Regional differences in English phonology make local dialects important. Shandong dialect impacts English phonology and intonation. This study examines how the Shandong dialect influences English phonology and how dialects hinder English intonation learning.

2. Shandong Dialects

A dialect is a variant of a language [2]. According to the characteristics of dialects and the nature and development history of dialects, the linguistic community in China has divided modern Chinese into seven major regions: Northern dialects (official dialects), Wu dialects, Xiang dialects, Gan dialects, Hakka dialects, Min dialects, and Cantonese dialects [3]. 73% of Han Chinese speak Northern dialects. Shandong dialects are divided by region. These dialects have unique traits in addition to northern dialects. Shandong English learners are also affected by unique pronunciation regulations. This research examines dialect migration in southwest Shandong and Jiaodong.

3. Migration Theory

According to psychology, the transfer is the influence of one type of learning on another, and it relates to the transfer of skills, knowledge, and attitudes from one setting to another. Foreign language learning is affected by native language knowledge. Foreign language learning relies on transfer research. Starting from the behaviorist psychological theory, linguists C. Fries and R. Lado believed that learning is the reinforcement of stimuli and responses, the formation of habits, and the linking of old and new knowledge, so in foreign language learning, the habits of previous language learning, such as the native language, have a transfer effect on new foreign language learning. They suggested, “The main difficulty in learning a foreign language is to find out the differences between the learner’s native language and the target language to find out the differences between them and to explain or predict the difficulties and errors that have occurred or will occur in learning a foreign language, and to use them as a guide for the development of teaching materials and teaching activities” is Lado’s contrastive analysis hypothesis. Odlin summarizes second language acquisition.

Language transfer, according to Odlin, is “the effect of commonalities and differences between the target language and any other language that has been acquired (or not fully acquired).” [5]

In *The Study of Second Language Acquisition*, Rod Ellis categorizes native language transfer as Error or Negative transfer, Facilitation or Positive transfer, Avoidance, and Over-use [6]. Positive transfer is the transfer of a pattern or rule from the native language to the target language, which facilitates language learning.

Negative transfer is when the pattern or rule of the native language is different from the form of the target language, and the learner transfers the pattern or rule of the native language to the target language in the learning process, thus being interfered with or inhibited by the native language.

4. The Transfer Effect of the Shandong Dialect on English Phonology

4.1. Negative Transfer Effect

Yu Liming notes that when learners encounter a foreign language, their local language system and mental habits are already entrenched. Due to varied learning situations, foreign language learners must double their understanding, mastery, and application. According to behaviorist learning theory, old habits affect new habits, and for second language learners, native thinking implanted in the brain may interfere with the smooth acquisition of the original language. Thus, when learning English, the native language may negatively affect phonology.

4.1.1. Negative Transfer of [z], [c], [s] to [dʒ], [tʃ]

Southwest Lu students from Wenshang, Jiexiang, Jining, Chongzhou, Qufu, Zoucheng, Tengzhou, Zaozhuang, Weishan, Shanxian, and Dingtao pronounced [zh], [ch], and [sh] in Mandarin as [z], [c], and [s] in the dialect with lingual back consonants. Their dialects have no [zh] [ch] [sh] equivalents.

Shandong dialect pronounces paper (zhi) as zi, Chai as ca, and Shang as burial (sng). Thus, some dialect students pronounce the English fat alveolar sound [dz] [ts] [S] as [z] [c] [s], akin to Mandarin [zh] [ch] [sh]. This also makes it difficult to pronounce English terms like J [dZei] as [zei], much [mAtS] as spur, and showfau as sow [sau]. [dz][tS] [S] is a post-alveolar lumboglossal consonant. The right method to pronounce [S] is with the tip of the tongue close to the post alveolar, the body of the tongue raised close to the palate, and the lips slightly rounded and protruding to make a fricative as air flows through. In [tS], the tongue tip and end block the upper gingiva, squeezing air out from the tongue surface between the firm waist and the gingiva. [dz] is pronounced as [tS] with the tongue body lifted and the tongue end against the posterior end of the upper alveolus, save for vocal fold vibration. [dz] is turbid while [tS] is clear.

4.1.2. Negative Migration of [r] to [z]

Jining, Chongzhou, Zoucheng, Wenshang, Qufu, Weishan, Dintao and Shanxian in Liaocheng and Heze all pronounced the Mandarin [r] as [z] sound therefore, some students in these areas confused the dialectal [z] with the English [r] sound when reading root, rap, real, room, red as zoot, zap, zeal, zoom, zed. [r] is an alveolar sound, which is produced between the tip of the tongue and the gingiva. It should be pronounced with the tip of the tongue rolled up, close to the back of the upper gingiva, with the lips slightly protruding and the air flowing through the tip of the tongue and the gingiva forming friction [7].

4.1.3. Negative Migration of [s], [z] to [T], [e]

[T], [e] is the most confusing dental consonant for Chinese students learning English (dental). In *Linguistics Across Cultures*, Lado mentions that when foreign language learners learn a phonological unit that does not exist in their native language, they replace it with a similar phonological unit in their native language. This is why many learners pronounce this [eis], thank [ank] as [zis], [sank]. However, for some students, the dialect also plays a positive transfer role in [T],[e]. The author will discuss it specifically in the positive transfer role. (iv) Negative transfer of [p], [b], [t], [d], [g]. Blast (stop) [p], [b], [t], [d], [k], [g] have similar phonological units in both Mandarin and Shandong dialects, but in English [p], [t], [k] is more strongly voiced than in Chinese [p], [t], [k], and [b], [d] [g] are turbid consonants, while in Chinese [b] [d] [g] are non-voiced clear consonant parts Regional learners always add a vowel [E] after the words ending in this group of blast sounds, for example, map [m ep] is pronounced as [mepe] dog [dog] is pronounced as [dogp], pet [pet] is pronounced as [petE], and kick [kik] is pronounced as [kikE].

4.2. Positive Transfer Effects

The special pronunciation rules that exist in dialects have different effects on students' learning of phonology. Although the native language has more negative transfer effects on phonological learning, the positive transfer effects of some specific dialect pronunciations cannot be denied.

4.2.1. [T], [e]

The author discussed the negative transfer effect of [T],[e]. Some learners could not pronounce this pair correctly because of the gap in this group of phonemes in their native language. However, for some learners of English in the Jiaodong Peninsula, the native language has a positive transfer effect on this group of phonemes. The dialects of Longkou, Jiaozhou, and Penglai in Shandong Province all have phonetic sounds that are similar to [T],[e] in the way they are pronounced. For example, [z] in

purple (zi s), [s] is pronounced with the tip of the tongue lightly touching the back of the upper teeth, and the airflow is sent out from the tongue [8].

4.2.2.[v]

The labiodental [v] is produced between the lower lip and the upper teeth. It is pronounced with the lower lip lightly against the upper teeth and the airflow outward to produce the sound from the gap. For Chinese learners, there is no such pronunciation in their native language. So when pronouncing five [Faiv], it is often pronounced as [Faiw]. Some words ending in [v] are pronounced as [w], and the mouth shape becomes smaller and the lips protrude forward. The same is true for the corresponding clear consonant [F]. This pronunciation exists in the areas of Sishui, Weishan, Tengzhou, Zaozhuang, Heze, Juno, Dingtao, Shanxian, and Caoxian. The most typical example is the pronunciation of 水 (shui) as 𠵹 (F i) by the people of Sishui.

4.2.3.[z], [s]

Some dialects in Shandong only have the lingual front [z], [c], [s], but not the lingual back [zh], [ch], [sh], which is difficult for learning postalveolar consonants, but relatively easy for learning the alveolar consonants [z], [s]. Learners can take advantage of the dialect to master this set of pronunciation rules.

5. The Negative Transfer of Dialects to English Intonation Learning

Chinese, a tone language, has a radically distinct intonation from English, a non-tone language. Chinese sentence intonation features several rising and falling word tones (intonation), while English has no word tones and distributes its rising and falling shifts across all intonational units. This large discrepancy disrupts English intonation acquisition. Dialect vocal tones differ from Mandarin and negatively affect English intonation learning.

5.1. Tone and Intonation

Regarding the relationship between Chinese word tone and intonation, Zhao Yuanren argues that tone and word tone can co-exist and that the phenomenon of addition of tone and intonation occurs, and that the relationship between them is an algebraic sum [8]. Chinese word tone and intonation coexist. In Chinese, word tone determines the structure of pitch variation and fundamental frequency patterns, followed by intonation. In English, there is no word tone, so intonation and stress determine the structure. Thus, English and Chinese pitch changes differ greatly. Both languages use intonation, but Chinese is completely controlled by word tone, while English is just somewhat constrained by stress.

The dialects have four tonal categories, but the values are different from Mandarin, hence the tones are distinct. Mandarin's yinping is a 55-degree high-flat tone. Most dialect counties and cities read yinping as a descending ascending tone, 213, 324, and 313. Yangping is a high-rising tone in Mandarin, rising from the third degree to the fifth degree, recorded as 35. Most dialects read Yangping as a falling tone, falling from the fifth degree to the third degree, recorded as 53, or as a high flat tone, recorded as 55. The two most frequent dialects are low-flat tones 31 and 312, sometimes known as 212.

The dialect has high flat tones, but no low flat tones or other high flat tones; no rising tones; no descending tones from the highest to the lowest, only low descending from half high to half low; and small pitch changes, whether yinping 213, 324, 313, yangping 53, 55, up 55, 24, or de-voicing 31, 312, 212. The maximum pitch change is three degrees. Only descending or ascending tones exist.

English RP has high, low, and other high flat tones: There are rising and falling tones, and the pitch variations are large and unrestricted.

Due to the dialect's pronunciation habit of mainly descending and high flat tones with little change in pitch and no rising tones, students in dialect areas tend to speak English with a single tone, little variation, and little rise and fall, making it difficult to learn RP with a stepped-down tone. They often substitute high flat tones for low flat tones because they are unfamiliar with them. Due to the tiny pitch change, high descending and high ascending sound flat and dull. When reading English general question phrases in rising tones, the last stressed syllable must be slightly lowered and then raised again. However, dialect pupils hear questioning lines in a derogatory tone and cannot understand them.

5.2. Alliteration

Accents stress words and utterances. Word stress is the intensity, length, pitch, and quality of the syllable. English is intonational and emphasis is vital. Stress drives rhythm and intonation. English stress relies on pitch, pitch length, pitch intensity, and tone quality. Chinese has tones for each syllable. Chinese tone is more essential than accent phonemically. Mandarin Chinese's light sound is a low-stress syllable. Mandarin Chinese syllables are either read loudly with tone or weakly as light sounds. Tone length, pitch, and intensity all affect Chinese stress. Thus, English stress is mostly pitch, while Mandarin stress is mostly duration. Thus, students' prolongation to reflect English emphasis, which distorts the rhythm of English utterances, affects intonation cluster division and causes intonation problems. Weakly pronounced syllables in Chinese never appear on the initial syllable, but in English, they can exist on any syllable. English allocates the stressed syllable first and the others weakly, while Chinese assigns the weakly pronounced first and then the primary and secondary stress. English polysyllabic words have one (rarely two) stressed syllables and the rest are weakly pronounced, while Chinese ones have one weakly pronounced and the rest emphasized [1]. Chinese has more stressed syllables than English, and pupils are habituated to reading English with weakly pronounced syllables overly heavily. For the first syllable poorly read, the accent back of the word, pupils struggle and often put the accent in front or re-read. Misplaced stress can cause inappropriate division of intonation clusters and the inability to apply intonation patterns, which can severely impact English fluency and intonation.

Dialects also have unique word-creation patterns. Most dialects include overlapping syllables with suffixes after monosyllabic verbs to emphasize the same meaning, e.g., "si" is "sibasiba," "beng" is "bengdabengda," etc. In the dialect, "drum, deng, hou, get, get panic, get coax, point a" and other affixes after monosyllabic verbs generate "V drum, V deng, V hou, V get, V get panic, V get coax, V point" type multi-syllabic words. "Daogu" means continually fiddle, "fandeng" means turn, "kundehuang" implies stuck, etc. Adjectives that overlap signify "special, most". "Yellow" signifies "especially yellow," "red" means "especially red," "cold" means "especially cold," etc. These overlapping word constructions make dialect dialects produce more accents, so dialect students read English with too many accents, intonation groups are not properly divided, and the intonation pattern is not correctly applied, harming the sensation of speaking English and beauty.

5.3. Rhythm

Chinese is a syllable-timed language, and syllables are the basic rhythmic unit, one word per beat, and each syllable occupies approximately the same duration of pronunciation, and each syllable is very clear [9]. Chinese rhythm is character-based. English accents are rhythmic units, not syllables. Emphasized syllables are louder, richer, and longer. Weaker, confused, and shorter unstressed syllables. English rhythm is heavy and light syllables, and only the stressed syllable is dominant. The

negative migration of one word and one beat in Chinese makes it harder to acquire the rhythm of English with phonetic steps as the unit and accented syllables as the dominant rhythm, which is commonly interpreted as one syllable and one beat or one word and one beat and loses its rhythm. Corinne Adams' monograph *English Speech Rhythm and the Foreign Learner* investigates the features, challenges, and demands of students studying stress-timed languages whose original language is syllable-timed. Adams claims that overstressed native syllable-timed students speak English like this. His experiments reveal that these students repeat all Anglo-American words and many others. Second, sentences feature excessive gaps between words and syllables.

6. Conclusion

The Shandong dialect's phonological system differs from English in consonant parts and pronunciation, and its intonation system differs in tone, stress, and rhythm. These qualitative differences negate English phonological learning [10]. Therefore, in teaching English in dialect areas, we should target this negative transfer, teach according to the needs of the students, and gradually eliminate these disturbances in a focused manner to promote and improve English teaching.

References

- [1] Wen X, Jia Y. *Joint Effect of Dialect and Mandarin on English Vowel Production: A Case Study in Changsha EFL Learners*[C]//*Interspeech*. 2016: 185-189.
- [2] Li Q. *An empirical study on the application of lexical chunk to college English writing*[J]. *Journal of Language Teaching and Research*, 2014, 5(3): 682.
- [3] Sun Y. *An analysis on the factors affecting second language acquisition and its implications for teaching and learning*[J]. *Journal of Language Teaching and Research*, 2019, 10(5): 1018-1022.
- [4] Jing G A. *Cognitive Language Transfer from Shandong Varieties to English Phonological Acquisition*[J]. *DEStech Transactions on Social Science, Education and Human Science*, 2016.
- [5] Jia Y, Li B, Li A. *A Typological Study of English Monophthongs Acquisition of EFL Learners in Shandong Dialect Area Region*[C]//*2018 Oriental COCOSDA-International Conference on Speech Database and Assessments*. IEEE, 2018: 49-54.
- [6] Wen X, Jia Y. *Joint Effect of Dialect and Mandarin on English Vowel Production: A Case Study in Changsha EFL Learners*[C]//*Interspeech*. 2016: 185-189.
- [7] Qixiu Q I N. *A Probe Into the Negative Impact of Sichuan Dialect on English Phonetics Learning and Countermeasures*[J]. *Studies in Literature and Language*, 2014, 9(2): 16-19.
- [8] Zhao H. *Cross-Language Influence English Learning as Chinese Learners*[C]//*2022 International Conference on Science Education and Art Appreciation (SEAA 2022)*. Atlantis Press, 2022: 46-53.
- [9] Wang Y, Jia Y, Li A, et al. *Acquisition of English monophthongs by EFL learners from Chinese dialectal region—A case study of Ningbo*[C]//*2016 Conference of The Oriental Chapter of International Committee for Coordination and Standardization of Speech Databases and Assessment Techniques (O-COCOSDA)*. IEEE, 2016: 210-214.
- [10] Wang Q. *The national curriculum changes and their effects on English language teaching in the People's Republic of China*[J]. *International handbook of English language teaching*, 2007: 87-105.