

# *The Role of Phonological Awareness in Second Language Instruction: A Comparison of English, Standard Chinese and Tongxiang Dialect*

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**Abstract:** As a second language learner, mother tongue and dialect would result in difficulties and frequent errors in the second language acquisition. This paper starts from the analysis of Tongxiang dialect and Standard Chinese, and compares the phonetic differences, including consonants, vowels, syllables, rhythm, tone and intonation between Standard Chinese, Tongxiang dialect and English, points out the importance of recognizing these differences in second language learning and help second language learning and teaching. So that second language learners and instructors can realize the importance of phonological awareness, as well as phonetic learning in the process of language learning. Instructors should make full use of the positive transfer in language learning to help Chinese learners learn English, and at the same time learn to reasonably avoid the negative transfer of the mother tongue to the target language.

## 1. Introduction

As a second language learner, in the process of English learning, some phonemes that do not exist in the mother tongue, or phonemes that exist in the mother tongue but not in English will be encountered, resulting in difficulties and frequent errors in the acquisition. The sound patterns or structure of our native languages have some influence on the speech or production of our second language. Many previous researchers have proved that transfer has great impact on second language learning, it has both positive effects and negative effects. Positive transfer refers to the phenomenon that one kind of content plays a positive role in another kind of content in language learning; negative transfer refers to the phenomenon that one kind of content interferes or inhibits another kind of content in language learning.

A dialect is a language variety with its own regional or social characteristics. It differs from other varieties in pronunciation, vocabulary, grammar and word order. Due to China's vast land and abundant resources, even the Han nationality has seven major dialect areas, including Northern dialect, Wu dialect, Hunan dialect, Gan dialect, Hakka dialect, Min dialect and Cantonese dialect. In China, English learners will not only be affected by standard Chinese, but also dialects in various regions

will have an equally important impact. The Tongxiang dialect belongs to the Sujiahu areas' Wu dialect. In terms of geographical location is in the junction zone of Shanghai, Hangzhou, Suzhou and Huzhou. Therefore, the Tongxiang dialect can be said to be a transitional dialect between the Jiaying and the Huzhou (Yao, 2016: 1)<sup>[1]</sup>.

This paper starts from the analysis of Tongxiang dialect and Standard Chinese, and compares the phonetic differences between Standard Chinese, Tongxiang dialect and English, and aims to point out the importance of recognizing these differences in second language learning and help second language learning and teaching.

## 2. Segmental Awareness in Second Language Instruction

### 2.1. Consonants

There are noticeable differences in consonantal distributions between Tongxiang dialect and English. The table 1 and table 2 show the consonant system of each language.

Table 1: Consonants in Tongxiang dialect

Places of articulation Manner of articulation		Bilabial	Labiodental	Alveolar	Palatal	Velar	Glottal
Stop	voiceless	unaspirated	p		t		(ʔ)
		aspirated	p'		t'		k'
	voiced	b		d		g	
Affricate	voiceless	unaspirated		ts	tç		
		aspirated		ts'	tç'		
	voiced				dʒ		
Fricative	voiceless		f	s	ç		h
	voiced		v	z	j		ʕ
Nasal	voiced	m		n	ɲ	(ŋ)	
Liquid (lateral)	voiced			l			

Table 2: Consonants in English

Places of articulation Manner of articulation		Bilabial	Labiodental	Interdental	Alveolar	Palatal	Velar	Glottal
Stop	voiceless	p			t		k	ʔ
	voiced	b			d		g	
Affricate	voiceless					tʃ		
	voiced					dʒ		
Fricative	voiceless		f	θ	s	ʃ		h
	voiced		v	ð	z	ʒ		
Nasal	voiced	m			n		ŋ	
Liquid (voiced)	central				r			
	lateral				l			
Glide	voiceless	ʍ					ʍ	
	voiced	w				j	w	

In the vertical column of manner of articulation, we can notice that there is no glide and central liquid /r/ found in Tongxiang dialect. Then, looking at the horizontal column of place of articulation, there is large difference of alveolar and palatal between Tongxiang dialect and English. There are /ts/, /ts'/ in Tongxiang dialect, while do not exist in English. For the palatal, /tç/, /tç'/, /dʒ/, /ç/, /ɲ/ are quite different from the English of /tʃ/, /dʒ/, /ʃ/, /ʒ/, so some words like “watch”, “George”, “push” cannot be appropriately pronounced by people who are affected by the dialect. In addition, there is

no interdental /θ/ and / ð / found in Tongxiang dialect.

For these differences, we can find that some mistakes would be made when we learn English. As in Tongxiang dialect, there is no retroflex fricative or affricate /ʂ/, /tʂ/ in standard Chinese, for us, it's also difficult to pronounce palatal fricatives /ʃ/, /ʒ/ in English. For example, English word “sheep” (/ʃi:p/) may would be pronounced as /ɕp/, which is heard like “sip” by us. At the same time, there is no interdental fricative /θ/ both in standard Chinese and Tongxiang dialect, many Chinese students would pronounce the word “thank” (/θæŋk/) as “sank” (/sæŋk/).

As for these differences, instructors must be aware of the teaching skills to help learners overcome the difficulties of pronouncing some consonants that do not exist in Tongxiang dialect and avoiding the negative effects of the dialect. At the same time, it is also important for instructors to explore the similarities between Tongxiang dialect and English, and to make use of the similarities and positive transfer between languages in English teaching to help students acquire foreign languages better.

## 2.2. Vowels

The Tongxiang dialect and Mandarin are both Chinese languages and there are great similarities between the two, although differences exist. Comparing the standard Chinese's vowel system with that of English reveals some significant differences. Some brief introduction of the vowel systems of each of them are showed here.

Firstly, San Duanmu (2007: 35-40)<sup>[2]</sup> claimed that standard Chinese has 13 vowels ([i], [y], [u], [o], [ɛ], [ɤ], [e], [ə], [A], [ɑ], [a], [æ], [ɐ]) derived from 5 vowel phonemes (/i/, /y/, /u/, /ə/, /a/, except for the two apical vowels and the retroflex vowel [ɤ]). /i/, /y/, /u/ are the high vowels, /ə/ is the mid vowel and /a/ is the low vowel.

Secondly, English has 17 vowels: [i], [ɪ], [e], [ɛ], [æ], [a], [ɜ], [ɜ], [ɔ], [ə], [ɑ], [ɒ], [ʌ], [ɔ], [o], [ʊ] and [u]. According to the different positions of the tongue, vowels in English can be classified into several types. Vowels by pulling the body of the tongue back towards alveolar region of the mouth are back vowels. Vowels by raising the tongue body and pushing it forward to the palatal region are front vowels. With the tongue body in an intermediate position on the front/back axis can produce the central vowel [ə]. Britain English has a conservative variety of central vowel, the [æ], and it is called Received Pronunciation (RP).

Besides, according to the relative height of the tongue, vowels can be divided into several types. With the tongue body relatively high in the mouth are high vowels; with the tongue body is relatively low are low vowels; and the mid vowels are in an intermediate position on the high/low axis.

It can be easily found that English has more vowels than standard Chinese.

According the experiment by Li Xin (2020: 55-57)<sup>[3]</sup>, we can conclude that (1) It's easier for Chinese to learn [i] and [e] because they are “identical” to Chinese vowels; (2) the “similar vowels” [o], [u], [ɑ], [ʌ] and [ɔ] may be easier than “different vowels”; (3) the “different vowels” [ʊ], [ɛ], [æ] and [ɪ] are difficult to learn. For example, English word “tea” /ti:/ is similar to Chinese word “ti” /ti/, it's easier for us to pronounce it.

Then I come to compare the finals (simple or compound vowel of a Chinese syllable) in Tongxiang dialect with vowels in English. Finals in Tongxiang dialect can be divided into four kinds (Yu, 1999: 2)<sup>[4]</sup>, they are monophthong final, diphthong final, nasal vowel final and the fourth tone final. These four kinds of finals can also be classified into three types according to their manner of articulation, which are called opening articulation, inception articulation and closing articulation.

We can reveal from the comparisons that there are many vowels in Tongxiang dialect and the combination of vowels are complex, but there are still some vowels in English do not exist in Tongxiang dialect, like /ʌ/, /e/. The biggest characteristic of Tongxiang dialect is that the most of the nasalization of vowels is /n/, thus, words syllables in English finalized with /ŋ/ are difficult for us to

pronounce accurately. For example, English word “sing” (/sɪŋ/) may be pronounced as “sin” (/sɪn/) by learners from Tongxiang. In addition, there are no long vowels in both Tongxing dialect and standard Chinese. The tense vowel as well as the long vowel /i/ in “beat” may be pronounced as a short lax vowel /ɪ/ in “bit”, which would cause some puzzles.

### 3. Suprasegmental Awareness in Second Language Instruction

#### 3.1. Syllables

All words can be divided into one or more syllables (Andrew R. et al, 2009: 41)<sup>[5]</sup>. In English, a syllable typically contains a consonant or set of consonants followed by a vowel followed by another consonant or set of consonants, e.g. cat /kæt/ or springs /sprɪŋz/. English allows a wide variety of syllable types including both open and closed syllables: CV (open syllable), CVC CCVC, CCVCC, CCCVCC (closed syllable). But there are rules for combinations of consonants in consonant clusters. For example, the two nonsense words “click” and “cnick” both contain initial consonant clusters /cl/ and /cn/ but the only permissible consonant combination is /cl/, not /cn/, because it should have two levels of sonority in the onset of syllables.

While in Chinese, a Chinese Character usually represents a syllable. A syllable can be made up of one phoneme or two or more phonemes. There are four syllable types in Chinese: V, CV, VG, CVG, e.g., /a/, /la/, /an/, /bang/. We can conclude that (1) except the nasals /n/ and /ŋ/, Chinese does not allow a word to end with a consonant; (2) Chinese does not permit both initial and final consonant clusters.

#### 3.2. Rhythm, tone and intonation

##### 3.2.1. Differences of rhythm in English and Chinese

According to J. C. Catford (1977: 87-88)<sup>[6]</sup>, English is categorized as a stress-timed language, which means that the amount of time it takes to say a sentence in stress-timed language depends on the number of syllables that receive stress, either minor or major, not on the total number of syllables (Peter A., Susan. Ehrlich, 1992: 73)<sup>[7]</sup>. For example, it would take approximately the same amount of time to say the following two English sentences: (1) Cats eat fish. (2) The cats has eaten the fish.

While Chinese is categorized as a syllable-timed language, which means that the amount of time it takes to say a sentence depends on the number of syllables in the sentence. For example: (1) mao/chi/you; (2) mao/chi/guo/you/le. The time to say these two sentences depends on the number of syllables they contain.

##### 3.2.2. Differences of tone in English and Chinese

The pitch of the voice is very important in language, and all languages make use of it for some purpose, and the different pitches are called tones. English is not a tone language, because the pitches in syllables of English cannot change its meaning. But Chinese is a tone language.

The pitch changes during the course of the syllable are called contour tones. Standard Chinese gets more complex contour tones in which the tone first rises then falls or vice versa. The first tone in standard Chinese is also called a high-level tone with a pitch value of 55, indicating that the tone starts and ends at the same pitch level of 5. The second tone starts at the pitch level 3 and ends at level 5, and is thus known as a high-rising 35 tone. The third tone with a 214 contour is commonly referred to as a low-rising tone, starting to dip at level 2, rising from level 1, and ending at level 4. The fourth tone is a 51 falling tone, starting at level 5 and ending at level 1 (Sun, 2006: 39)<sup>[8]</sup>.

Take four words as examples, “yī”, “yí”, “yǐ”, “yì”, they are distinguished solely by their tones.

“yī” means “one” with high level tone; “yí ” means “lose” with rising tone; “yǐ” means “already” with fall rise tone; and “yì ” means “idea” with falling tone. With different tones, Chinese words have different meanings, so Chinese is a tone language, and as a dialect of Chinese, Tongxiang dialect is also a kind of tone language.

### 3.2.3. Differences of intonation in English and Chinese

Intonation is variation of pitch that is not used to distinguish words (Victoria F. et al., 2009: 213)<sup>[9]</sup>. Language that is not tone language, such as English, is called intonation language. The pitch contour of an utterance may affect the meaning of the whole sentence. There are four types in English: the falling pitch, the rising pitch, the fall and rising pitch, the rise and falling pitch.

In addition, English is a stressed language, the stress of words can distinguish different meanings. For example, [ˈtrɑːnsˌpɔːt] “transport” (noun) and [trɑːnsˈpɔːt] “transport” (verb) have different meanings. Apart from the word stress, English also has phrasal stress, but it only used to emphasize the focuses, cannot distinguish the meaning.

## 4. Awareness of Phonological Process or Sound Changes in Second Language Instruction

Wherever human language is spoken, the natural sound changes result. Linguistic change is a process which pervades all human languages. English and Chinese are no exceptions.

Changes in the inventory of sounds in languages can occur through the loss of phonemes, and also can through the addition of phonemes. For example, the velar fricative in English /x/ is no longer part of the phonemic inventory of most Modern English dialects, “night” used to be pronounced [nixt], but now it is pronounced [naɪt], and it also became other segments, as in “elk” (Old English eolh [eɔlx]), it became a /k/. On the other hand, as for the addition of phonemes, here are some examples. Through a process of palatalization—a change in place of articulation to the palatal region, certain occurrences /z/ were pronounced /ʒ/, then the word “leisure” ([liʒər]) has the phoneme /ʒ/. In addition, with sound change, all allophone of a phoneme may become a separate phoneme. For example, the phoneme /f/ has the allophone /v/ when it occurs between vowels.

Apart from the sounds inventory, we can find that the phonemes of the word taken in isolation undergo changes due to the influence of surrounding phonemes when combine words with affixes and other words to form larger words and phrases. Phonological rule governs the distribution of schwa (in English) and the other vowels represents as a phonological process, in which one sound is changed into another sound under certain circumstances. Many rules change features from one value to its opposite or even add features not present in the phonemic representation. In this chapter, I will talk about the assimilation rules and dissimilation rules in English and Chinese.

### 4.1. Assimilation rules

The assimilation rule is that makes neighboring segments more similar. There are many assimilation rules in English and other languages. For example, the vowel nasalization rule, which means “Vowels are nasalized before a nasal consonant within the same syllable”. The vowels in words like len /lɛn/ will become nasalized to [lɛ̃n], but leck /lɛk/ will not be affected and is pronounced [lɛk], because /k/ is not a nasal consonant. In addition, the voiced /z/ of the English regular plural suffix is changed to [s] after a voiceless sound.

Both vowels and consonants in standard Chinese have assimilations. The consonant /n/ is often assimilated by the initials of the following syllables when making rhyme endings and changes the pronunciation part. For example, “/sən/ /mɪŋ/→/səm mɪŋ/”; “/rən/ /pɪn/→ /rəm pɪn/”. Vowels also have the phenomenon of assimilation. For example, /a/ is a middle and low vowel. When it is before

the vowel /i/ or consonant /n/ in the tongue position, it is assimilated into the front vowel /a/, such as /ai/, /an/; When it is before the vowel /u/ or the consonant /ŋ/ at the back of the tongue, it is assimilated into the back vowel /a/, such as /au/, /aŋ/; When it is between /i/ and /n/, /y/ and /n/, it is assimilated due to the influence of the front and back sounds, and the tongue position is raised and turned into a higher and front /ɛ/, such as /ien/, /yɛn/.

We can scientifically use the positive transfer function of the mother tongue to serve the teaching of English assimilation. Comparing the assimilation of some English and Chinese pronunciations, we will find that some rules of Chinese pronunciation can also be applied to English pronunciation. For example, the consonant /n/ in Chinese becomes /m/ after being affected by the initial initials /p/, /b/ and /m/. This rule is very similar to that of /n/ and bilabial /p/, /b/, /m/ in the phenomenon of English assimilation, that /n/ becomes /m/. Instructors only need to start from the Chinese phonetic assimilation that students are familiar with, and give them some guidance, students can better understand and master the rules of English phonetic assimilation.

## 4.2. Dissimilation rules

Dissimilation rules means that certain segments become less similar to other segments. An example of easing pronunciation through dissimilation is found in some varieties of English, in which there is a fricative dissimilation rule. This rule applies to sequences /fθ/ and /sθ/, changing them to /ft/ and /st/.

In standard Chinese, the phenomenon of dissimilation is much less than that of assimilation. In Mandarin Chinese, if the two third tones connect, the first upper tones must become rising tone (yangping), which is the tonal dissimilation. For example, [kuaŋ214tʃaŋ214] becomes [kuaŋ35tʃaŋ214]; [iə21ts'au214] becomes [iɛ35ts'au214].

## 5. Conclusion

The mother tongue and the second language are not two completely different systems, but form a common phonological space, determine the phonetic structure of the two languages, and interact in the development of the second language. The goal of adult second language learners is to overcome those processes in the mother tongue that interfere with second language production, and to use those processes that appear in the second language but not in the mother tongue (Wang, 2007: 26)<sup>[10]</sup>.

Second language learners have established the phonological system of their mother tongue from an early age. Therefore, when we start learning a second language, we need to readjust their perception of phonetic processing and phonological category reorganization (Flege, 1998: 161)<sup>[11]</sup>. When learning the second language, the awareness of phonology is very important.

This article compares the differences in phonetics between English, standard Chinese and Tongxiang dialect, so that foreign language learners and instructors can realize the importance of phonetic learning in the process of language learning.

Voice is the foundation of language and an important embodiment of language (Ma & Zhao, 2017: 43)<sup>[12]</sup>. Foreign language instructors should have a comprehensive and adequate understanding of the phonological rules of the language, they should be quite familiar with the segment and suprasegment characteristics of the language, and have a solid foundation of “theoretical knowledge of the operation of the target language phonetic system” (Burgess J., Spencer S., 2000: 193)<sup>[13]</sup>. Instructors should make full use of the positive transfer in language learning to help Chinese learners learn English, and at the same time learn to reasonably avoid the negative transfer of the mother tongue to the target language.

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