Description of the articulation of consonants of English

Chia-Lin Hsieh, Yi-Shan Chiu

Chapter One

Introduction

In 1996, the Education Innovation Council suggested that the Ministry of Education should make English education compulsory in elementary curriculum. Consequently, English teaching has been officially implemented in elementary schools from the fifth grade since the year 2001. The main purpose is to cultivation students' international visual field and use international language in their daily life.

Wu (2001) pointed out that pronunciation affects the comprehension of listeners. The reason is the pronunciation incorrectly. If the pronunciation is correct, it not only can attain to write down the words we hear but also enhance the English learning motivation. Furthermore, all language communication begins with the sounds. Sounds can help beginners to extend memories, and hence the researchers think that the correct pronunciation is important for learners' learning process.

Since Taiwan is taken as an EFL learning environment, learners do not have many opportunities to build up adequate amount of oral vocabulary. Some methods are suggested, such as sight words and K. K. phonetic symbols. However, sight words often refer to the high frequency words recognized by learners. When encountering a

new irregular word, which does not follow phonics rule, a learner may still have no ideas about how to say the word. Phonics instruction provides children with the means of comprehending unfamiliar words in written forms. It is expected that through the sounds of the words, children will figure out the meanings of the unrecognized words. Therefore, phonics plays the role of helping children, especially beginner learns, to recognize words in reading and spelling programs (Lin,2001; Kuo, 2003).

The main characteristic of phonetic symbols is that each symbol represents only one sound, which makes teaching phonetic symbols distinct from phonetics. K. K. phonetic symbols system is one of the symbols systems to transcribe English language. It is a symbols system, revised by Kenyon and Knott to transcribe American English, which is largely used in the textbooks and dictionaries published in Taiwan. Since most textbooks and dictionaries in Taiwan use K. K. phonetic symbols to transcribe the sound of English, the phonetic symbols system here refers to K. K. phonetic symbols.

Chapter Two

Literature Review

Some Chinese learners of English still struggle in pronouncing English words accurately. Their problems in pronouncing accurately might result form the incomplete phonological representation. Both incomplete phonological representation and lack of phonological awareness skills would cause students problems in learning to read and pronounce English words accurately.

Phonological awareness is on subpart of meta-linguistic skills that enables one to manipulate, segment, and blend sounds in words (Wagner, Torgesen, & Rashotte, 1994). It also includes the ability to construct and store phonological representation of written words or spoken words in one's mind (Morais, 2003). Eldredge (1996) considers that phonological awareness should include the following: 1. Words within sentences. 2. Rhyming units within words. 3. Beginning and ending sounds within words. 4. Syllables within words. 5. Phonemes or sounds within words (phonemic awareness). 6. Features of individual phonemes such as how the mouth, tongue, vocal condos, and teeth are used to produce the sound. Overall, phonological awareness is a broad term that encompasses different linguistic and cognitive levels. Large amount of research has shown that poor phonological awareness is closely related to poor language processing skills, including vocabulary learning (Dixon, Stuart, &

Masterson, 2002), foreign vocabulary learning (Hu, 2003), spelling (Hu 2004), and oral language production, including pronunciation (Cheung, 1995). Phonological awareness has been identified as a crucial tool for learners to succeed in various language tasks.

Roberts (2005) suggests that articulation accuracy played a vital role connecting reading acquisition and vocabulary development. To further investigate the relationship among articulation accuracy, vocabulary size, and word reading, Roberts (2005) used 45 Hmong or Spanish ESL children as participants. Results indicated both articulation and letter sounds had significant influences kindergarten phonemic awareness and both articulation and phonemic awareness influenced on the word reading performance of two language groups in first grade.

Chapter Three

Places and manners of articulation of English consonants

The sounds of all languages fall into two classes: consonants and vowels. Consonants are produced with some restriction or closure in the vocal tract that impedes the flow of air from the lungs. In phonetic, the terms *consonant* and *vowel* refer to types of *sounds*, not to the letters that represent them.

Place of Articulation

In describing consonants, it is also necessary to state where in the vocal tract a constriction is made-that is, where the vocal tract is made narrower. This is referred to as the place of articulation of a sound.

Bilabial consonants are made by bringing both lips closer together, such as, [p] *pat*, [b] *bat* and [m] *mat*.

Labiodental consonants are made with the lower lip against the upper front teeth. In English has two labiodentals: [f] *fat* and [v] *vat*.

Interdentals are made with the tip of the tongue protruding between the front teeth. There are two interdental sounds in most varieties of American English: [θ] *thigh* and [ð] *thy*.

Alveolar. Just behind your upper front teeth there is a small ridge called the alveolar. English makes seven sounds with the tongue tip at or near this ridge.

- For [t, d, n] the tongue tip is raised and touches the ridge, or slightly in front of it. [t] *tab*, [d] *dab* and [n] *noose*.
- For [s, z] the sides of the front of the tongue are raised, but the tip is lowered so that air escapes over it. [s] *sip* and [z] *zip*.
- For [l] *loose*, the tongue tip is raised while the rest of the tongue remains down, permitting air to escape over its sides. Hence, [l] is called a lateral sound.
- For [r] *red*, most English speakers either curl the tip of the tongue back behind the alveolar ridge- a retroflex sound-or they bunch up the top of the tongue behind the ridge.

Palatal. Sounds made with the tongue near the hard part of the roof of the mouth or occur by raising the front part of the tongue to the palate. [ʃ] *leash*, [ɛ] *measure*, [tʃ] *church*, [ʤ] *judge* and [j] *yes*.

Velar consonants are produced at the soft part of the roof of the mouth behind the hard palate-the velum. Sounds made with the tongue near the velum are side to be velar. [k] *kill*, [g] *gill* and [ŋ] *sing*.

Glottal sounds are produced at the larynx. English has two sounds made at the glottis. One is easy to hear: [h],as in *high* and *history*. The other is called a **glottal stop** and is

transcribed phonetically as [ʔ]. This sound occurs before each of the vowel sounds in *uh-oh.*

Manner of Articulation

Speech sounds also vary in the way the airstream is affected as it flows from the lungs up and out of the mouth and nose. It may be blocked or partially blocked; the vocal cords may vibrate or not vibrate. We refer to this as the manner of articulation

Voiced and voiceless sounds

If the vocal cords are apart when speaking, air flows freely through the glottis into the oral cavity. Sounds produced in this way are voiceless, [p] and [s] in super are two of the several voiceless sounds of English.

If the vocal cords are together, the airstream forces its way through and causes them to vibrate. Such sounds are voiced. [b] and [z] in buzz are two of the many voiced sounds of English.

Voiceless sounds fall into two classes depending on the timing of the vocal cord closure, when we say *pit*. We call this *p* **aspirated** because a brief puff of air escapes before the glottis closes. When we pronounce the *p* in *spit*, however, the vocal cords start vibrating as soon as the lips open. That *p* is **unaspirated**.

Stops are consonants in which the airstream is completely blocked in the oral cavity for a short period. All other sounds are continuants.

- [p], [b] and [m] are bilabial stops with the airstream stopped at the mouth by the complete closure of the lips.
- [t], [d] and [n] are alveolar stops; the airstream is stopped by the tongue, making a complete closure at the alveolar ridge.
- [k], [g] and [ŋ] are velar stops with the complete closure at the velum.
- [tʃ] and [dʒ] are palatal affricates with complete stop closures. They will be further classified later.
- [ʔ] is a glottal stop. The air is completely stopped at the glottis.

Fricatives in the production of some continuants, the airflow is so severely obstructed that it causes friction.

- [f] and [v] are *labiodental fricatives*; the friction is created at the lips and teeth, where a narrow passage permits the air to escape.
- [θ] and [ð] are *interdental fricatives*, represented by *th* in *thin* and *then*. The friction occurs at the opening between the tongue and teeth.
- [s] and [z] are *alveolar fricatives*, with the friction created at the alveolar ridge.
- [ʃ] and [ɛ] are *palatal fricatives*, and contrast in such pairs as *mission* and *measure*.

- [χ] and [γ] denote velar fricatives. They are produced by raising the back of the tongue toward, but not quite touching, the velum.

Affricates are made by briefly stopping the airstream completely and then releasing the articulators slightly so that frication noise is produced. English has only two affricates, [tʃ] *ch*u*rch*, [ʤ] *ju**dg**e*.

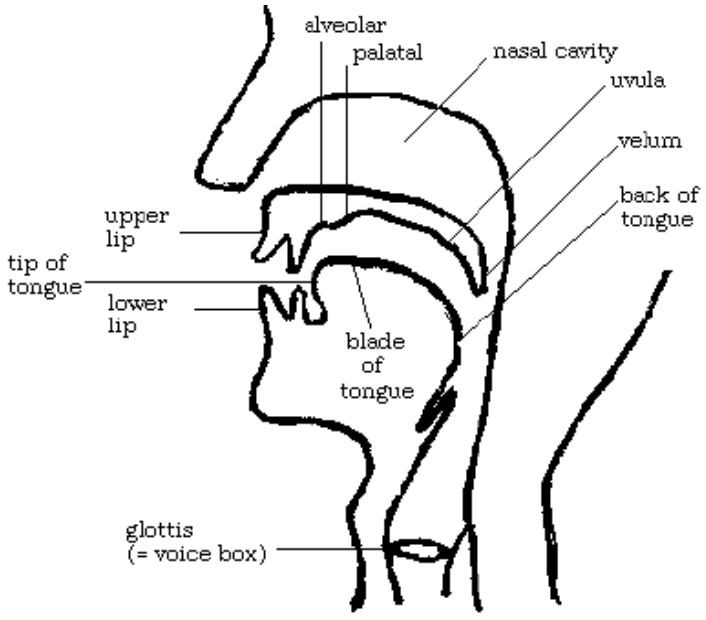
Liquids [l] [r] In the production of the sounds [l] and [r], there is some obstruction of the airstream in the mouth, but not enough to cause any real constriction or friction.

Glides [j] [w] the initial sounds of you [ju] and we[wi], are produced with little obstruction of the airstream. They are always followed directly by a vowel except when they are part of a diphthong.

Table 1.Manner of Articulation

Some phonetic symbols for American English consonants							
	Bilabial	**Labiodental**	**Interdental**	**Alveolar**	**Palatal**	**Velar**	**Glottal**
Stop (oral)							
voiceless	p			t		k	
voiced	b			d		g	
Nasal (voiced)	m			n		ŋ	
Fricative							
voiceless		f	θ	s	ʃ		h
voiced		v	ð	z	ɛ		
Affricate							
voiceless					tʃ		
voiced					dʒ		
Glide							
voiceless							
voiced	w				j	w	
Liquide (voiced)							
lateral				l			
retroflex				r			

Table 2. Place of Articulation



Chapter Four

Conclusion

From this study, we found that English consonants are important and effect learners' English words accurately. Learners' mispronunciation of L2 words could reflect their underlying incomplete L2 phonological representations. If students with more advanced phonological awareness skills, they would have more complete L2 phonological inventories in their interlanguage. Thus, they are more likely to perceive the sound differences between L1 and L2 and to pronounce English words accurately. On the contrary, if students who have less phonological awareness, they could not perceive the sound differences between L1 and L2. In addition, their inadequate phonological inventories could not assist them in pronouncing English words accurately.

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