The Influence of First Language on the Learning of Second Language

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Abstract. Language transfer has been an important role in the field of language acquisition. However, its importance is yet to be proven. This article briefly investigated to what extent first language (L1) influence the learning of second language (L2). From five aspects, the influences were presented, which was that L1 has significant effects on L2. Contrastive analysis was used to compare the two languages. The results showed that, the more similar L1 is to L2, the easier it would be for learners to master.

Keywords. Language transfer; First language; Second language; Contrastive analysis

1. Introduction

Verbal language is one of the major methods of communication. For the native language speakers, it is easy to notice the differences between native and non-native speakers simply by differentiating their pronunciation and the usage of vocabularies and sentences. Purcell and Suter (1980) have proven this by saying that native language speakers can be the "best predictors" of the languages of their kind. For some professional linguists, they may even make a right prediction of where speakers come from based on their broad knowledge of languages. From the contrastive analysis hypothesis, there is a high possibility that language transfer might happen in the second language acquisition because of the similarities and differences between L1 and L2 (Bian, 2013). The definition of language transfer is that, the prior knowledge of language learners on one language will affect their acquisition of another language (Pasquarella et al., 2011). That is, the more two languages have in similar, the easier to acquire, and vice versa. For example, French and Spanish belong to the same language system as English, which is an alphabetic language system, while Chinese is in the ideographic language system. Comparing to learn Chinese, it will be much easier for a British man to learn Spanish. So, it is necessary to be aware of the differences while learning and using different languages, because they make a significant influence on the second language acquisition. The influence can be both positive and negative transfer. This article will analyze and demonstrate the enormous influences of Chinese on the acquisition of English from five main perspectives, which are phonology, prosody, morphology, syntax and decoding.

2. Phonology

The main principles of phonology are to master how sounds are arranged and what differences might happen with the change of sounds and sound order. (Crystal, 2005). In China, there are a large number

of dialects but only one modern official language -- Mandarin and its phonetic system is "Pinyin". Phonetically speaking, Mandarin Chinese is tone language while English is intonation, which is one of their most distinctive differences (Zhang and Yin, 2009). This difference will make it difficult for Chinese learners to master English sounds. This part will examine the differences and present the influences of L1 from four parts, which are phoneme & onset-rime.

2.1. Phoneme & onset-rime

In English, phoneme is the smallest unit and it has unique meaning. According to Gimson (1973), there are 44 phonemes, 20 vowels and 24 consonants in English. Unlike English, the syllable is the basic speech unit of Chinese, and Chinese syllables can be divided into two parts: onset and rime, which are also called as consonants and vowels respectively. So, it can be concluded that the two languages each have their own special language units.

This is the first problem of L1 influencing the acquisition of L2. Most of the English phonemes can be found in Chinese, but there are still some cannot. For instance, English vowels like /æ/ /au/ /i/, /u/ and consonants /ð/ and /r/ do not exist in Chinese. If the phonemes exist in two languages, it will not be difficult to transfer from L1 to L2. Learners simply need to copy the pronunciation from L1. As for those phonemes cannot be found in L2, learners will have difficulty both receiving and producing the sound. When listeners cannot receive the correct sound, it will then cause some communication misunderstandings. As for those missing phonemes in L2, learners will have to try to substitute for a closer sound in L1. For example, replace /z/ with /ð/. Though the two sounds are similar, they can still bring misinterpretations for listeners to distinguish the actual meaning of the speakers.

This is the second problem for the acquisition of English for Chinese learners. How to pronounce the phonemes and how they are placed in words are different in two languages as well. For example, /r/ exists in both languages, but the pronunciation in two languages is totally different. So, when speaking "road" and "rose", Chinese learners will always have trouble rolling up their tongues. They might produce a wrong sound or even a weird sound. As for the combination of phonemes, in Chinese, the general way is to add a consonant with a vowel, but not consonant cluster, and the combination will always end with a vowel (Bowen, 1983). As a result, learners have problems in pronouncing "month".

Another important difference between Chinese and English is the place of articulation and manner of articulation and the function of them. In English, there are some distinctive articulation methods, for instance, linking, elisions and assimilation. Each of them has a distinctive pattern of making a speech sound. For linking, it requires the consonant at the end of one word to be carried over to be linked with a vowel at the beginning of the next word. For example, the phoneme, /r/, will need to be linked with the next word in the noun phrase, more eggs, which will sound like /mɔːregz/. However, the sound segments in Chinese are discrete and independent of each other, so this speech pattern cannot apply to the Chinese. This also causes challenges for Chinese learners when confronting with this kind of articulation pattern.

2.2. Prosody

Prosody is crucial for speech and natural language (Roach, 2009). It is also associated with syllables, words, or phrases -- duration, pitch, tone and stress.

2.3. Stress

It is inevitable for some learners to make mistakes when pronouncing stress of words and figuring out the rhythm of sentences. One of the particular characteristics of English is that it has more stresses on syllables. If the stress on one word or sentence is not correct, listeners will have difficulty comprehending the exact meaning. This will definitely cause communication mistakes. The main reason might be the interference of their mother language. Different languages have their own stress patterns. When learners of L2 are learning L2, they may transfer their knowledge of stress pattern in L1 to L2, which will bring some misplacing stresses.

No matter what kind of language, in the speech production, it will involve muscular energy. Prominence will be achieved by variations in pitch of voiced syllables, the length of syllables, the

loudness of syllables and the differences in timbre (Teschner and Whitley, 2004). The level of stress can be divided into three types, which are primary stress, secondary stress and unstressed. Within a known language, stress patterns can normally be predicated for unfamiliar words. Words with different syllables have different stress patterns. A change in the stress pattern of a word will also change its sound. Monosyllabic words are all stressed. Generally, disyllabic words will either stress on the first syllable or the second syllable. For verbs, they will stress on the first syllable, for example, "enter"; for nouns, they will stress near the beginning of the words, for instance, "driving". Trisyllabic words are stressed on the third simply word if the final syllable is strong, for example, "entertain" (Li, 1999).

Stress in Chinese shares some features with English, such as high in pitch and longer in length. However, it still functions differently in these two languages. As shown in the last paragraph, one stress pattern is that in English words can differentiate lexical meanings when stress on different syllables, but not in Chinese. Chinese is a tone language; it varies tones to change lexical meanings of words. The stress pattern of this feature might be challenging for Chinese learners because they may have trouble mastering English word patterns.

The tone-units are the most important characteristic in English sentences. In a sentence, the part, no matter what, carries the significant meaning will always be stressed. In other words, the stress in sentences represent the relative degree of the sentence. So, it is not possible that all words share the same importance. The semantic relationship beneath a sentence will control its stress pattern to some extent. The key words, which contain crucial information, will be stressed and pronounced slowly and loudly.

"I go to school 'this morning."

The stress of this sentence is on "this morning" instead of afternoon or evening

"I go to 'school this morning."

The stress of this sentence is on "school", not home or anywhere else.

The Chinese sentence stress pattern share the same patterns with English, which is that stress on the word with the important meaning. So Chinese learners will experience less frustration when learning this part.

2.4. Tone and Intonation

Chinese is one of the tone languages which uses variations within a word to denote meaning differences. In Chinese, there are five tones: high level (tone 1), rising (tone 2), falling-rising (tone 3), falling (tone 4), and neutral tone (tone 5). When pronouncing one same word with five tones, the meaning of the word changes along with variation. For example, when a speaker pronounces yōu，yóu, yǒu，yòu, you, syllables are the same, but with four different lexical meanings, "silent", "swim", "have, "right", "null".

It is a natural circumstance that intonation transfer happens within Chinese and English for learners. According to Bolton & Kwok (1990), Chinese learners from different geography locations have different accents when speaking English. The special kind of English pronunciation is the result of various speech patterns across China. Each Chinese dialect has its own tone. The intonation transfer within the special Chinese dialect and English will cause Chinese leaners difficult to understand. As a result, it is necessary for Chinese learners to be sensitive to this difference in tone and to keep away from making mistakes of comprehension.

On the contrary, English is one of the intonation languages, which has special patterns on the utterances and the variations of utterances will convey different meanings. According to Roach (2009), speech consists of utterances and inside of it contains one or more tone-units, which are a group of words. The tone-units may carry the tonic stress of sentences. One of the methods to distinguish the speech rhythm of English is by its tone-units. For example, who are you is a three-syllable tone unit, "you" is tonic syllable and carries tonic stress. However, in Chinese, intonation is not so important.

Indeed, there are intonation in the utterances of Chinese. Normally, the intonation will at the end of the sentences. Because of the feature of Chinese which is a fixed tone, the intonation of Chinese sentences is not as various as in English. It mostly happens on the tone of words, instead of tone-units.

For example, the same sentence in English and Chinese may represent a different level of emphasis on meanings.

"I go to the 'library on Saturdays."

　　From the theories above, it is easy to understand that the emphasis of this sentence is "Saturdays". This could be an answer of a question, "where do you normally go on Saturdays?". The emphasis can switch place to any of the tone-units, such as "I", "Saturdays". However, in Chinese, example might be a little bit different. To express the meaning of "I go to library on Saturdays" with an emphasis on location, the word order should go as following:

我周六去图书馆。

Wo zhou liu qu 'tushuguan.

If the emphasis is on time, it should be as following:

我周六去。

Wo 'zhouliu qu.

　　Due to the differentiation on the importance of intonation in the two languages, it is reasonable that Chinese learners make mistakes on intonation thus failed to complete the purpose of communication. In English, changing intonation means changing emphasis and the real meaning of sentences. As a result, it is necessary for students to be aware of the knowledge of intonation and reduce the negative transfer of intonation on L2.

3. Morphology

3.1. Inflection & Derivation

According to Fromkin et al (2003), morphology studies the internal rules and structures of words and how would they form words. In English, there are two main types of morphology: inflection and derivation. Inflectional morphemes are bound morphemes that express grammatical. They determine number, person and tense. And they are closely related to the syntax of a language. Changing the form will not change the basic meaning or word class, for example, "plays, played, playing". The "s" refers to a third person singular in English, which cannot be found in Chinese.

For example, in English, the following two sentences are the correct expressions.

"he goes to school"

"they go to school".

While in Chinese, the verb which differentia one person and two people will not change.

"他去学校"（ta qu xuexiao）and "他们去学校"(ta men qu xuexiao).

　　However, derivational morphemes are restricted to attaching to specific word class or may change the word class, such as, un+ adjectives ⇒ unreal, unhappy. And they may have erratic effects on meaning, for example, adulthood/childhood. In these two words, "hood" represents the property of being; while "hood" in the "neighborhood" has different property. This adding prefixes and suffixes cannot apply to the Chinese and then will influence the second language acquisition.

3.2. Compound

It seems like inflection and derivation are two main types of word formation in English, but they fail to affect the same in Chinese. According to Kuo & Anderson (2006), over 75% of Chinese words are formed through compounding, which is also another word formation type in English. To compound, learners are required to create new words by combining two or more root words, for example, timesaving. According to Clark et al (1985), compounding in Chinese and English are both "right-headed". The morpheme on the right usually states classifications while the left morpheme always changes the meaning. And there are two types of compound, one is the transparent compound (Yuan & Huang, 1998). In this compound, it is easy to predicate the meanings of words, whether known or unknown. Taking "timesaving" as example, "timesaving" refers to an action that saves time. If changing the left morpheme to "money", the word will be "moneysaving", which means saves money. This compound patter can also apply to Chinese. "timesaving" in Chinese is "省钱"（sheng qian）. The left morpheme "sheng" means "save" and the right morpheme "qian" means "money". Another

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one is the opaque compound; the meaning of this kind compound relates to both of the morphemes in the words. Learners may not be able to predicate the true meaning of words. For example, "dead president" does not refer to a president who is dead. It means American dollar. While in Chinese, the word "奇葩"（qi pa）, the right morpheme "qi" literally means strange and the left morpheme "pa" means flower. Based on the morphemes of the word, it means a strange flower, but its true meaning is outstanding literature products or remarkable people. From what have mentioned above, inflection and derivation might be difficult for Chinese learners to acquire, because they do not have exact Chinese counterparts. Compound is easier for the reason that Chinese language has a similar pattern.

4. Syntax

English syntax is a part of grammar associated with the speakers' knowledge of sentences and sentence structures (Carnie, 2002). It involves combine different words into phrases, and then into sentences in a pecking order. It is also related to grammatical gender, number, tense, voice. In contrast, Chinese does not share the same features in terms of gender, number, tense and voice changing, which means it is non-inflection. In Chinese sentences, the meaning will be varied by reordering function words and their syntactic and semantic relations.

4.1. The Universal grammar

Universal grammar of Chomsky argues that it constrains the learning process of languages. In addition, it provides the parameters and the grammatical system that can be used on different settings of different languages. One of the proposed Parameters is the Null subject in tensed clauses. Under this parameter setting, English is required to have a subject while not necessarily in Chinese. It means that what is acceptable in Chinese sentences might not fit to English sentences. What's more, there is no such grammatical item as clauses.

Taking the following sentences as example:

"鼓励公众参与治污要多出实招"- "gu li gong Zhong can yu zhi wu duo chu shi zhao"

This is a headline from the most official news website in China – Renmin Wang. It means (subject) encourage the public to come up practical ideas on improving pollution. It is acceptable and comprehensible in Chinese. Because on Chinese context, readers will naturally assume the subject is the government. But if translate this sentence, it will be as the following sentence:

(subject) encouraged to come up with practical ideas regarding to the pollution problem.

Readers will wonder who encouraged the public, the government or someone else?

4.2. Sentence structure

Sentences are groups of words uniting together and expressing a complete meaning. The whole sentence will be realized by utterances of different words.

In terms of the surface of English sentences, they have linear organization. The order of the words inside a sentence will influence whether a sentence is grammatical or interpretable (Fabb, 1994). English sentence structures are created by recurring syntactic structures, which means they will combine large units with words, phrases. Normally, the sentence structure will be presented as following:
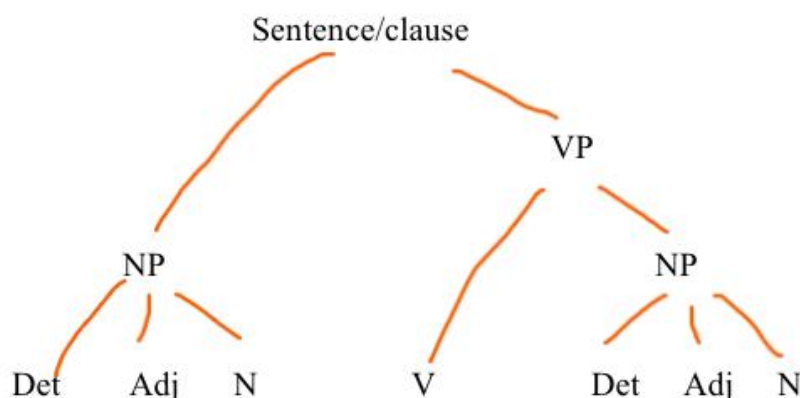
Unlike the English sentence structure who has a great deal of clauses, Chinese has more short sentences. Take the following sentences as example:

'Many people think that ATC consists of a row of controllers sitting in front of their radar screens at the nation's airports, telling arriving and departing traffic what to do' (Cambridge IELTS, 2011, p 75)

This is a long English sentence with several clauses; however, its translation of Chinese will only contain several sentences.

The differences on syntactic might impede the acquisition of L2 for Chinese learners. Though learners can assume that English as the opposite of Chinese on the principle of Null Subject Parameter, it is still difficult for learners to adjust to the grammatical system of English.

5. Decoding

Decoding is a skill used to identify the writing system of one language and to comprehend the meaning of words and sentences. Perfetti et al (1995) states that Chinese and English have two writing systems which are the nonalphabetic writing system and the alphabetic writing system. As Crystal (1995) proposed, it is hard to identify words with our mental lexicon in English. However, it is still possible to analyze English words. They can be broken down into smaller units of meaning, which are morphemes. The lexical meaning varies with the change of morphology features. Sentence meanings vary with the change of combination of words and word phrases.

However, unlike the English writing system, the Chinese writing system is in characters. Chinese characters are composed of basic strokes. Strokes are then combined from radicals. As for the radicals, they are the building blocks of Chinese characters. They often represent some common semantic or phonetic characteristic. For instance, 氵 is a radical and it means water. After combining to another radical 也, they can form a character 池, which means pool. "氵" can also combine with other radicals and then form a character with the meaning water underneath. For example, 江（river），河 (river)，湖(lake)，海(ocean). The formation of Chinese characters is mainly six types: pictograms, simple ideograms, compound ideograms, rebus, phono-semantic compounds and transformed cognates. Among them, the rebus takes most of the Chinese characters (Jerry 1988). Comparing the two different writing system, the Chinese system seems easier than English, which still does not reduce the pains of Chinese learners when they learn English.

6. Conclusion

In conclusion, this article briefly demonstrates some factors of L1 that may influence the acquisition of L2. Due to language transfer, the influences of L1 are shown from the five main section: phonology, prosody, morphology, syntax and decoding, containing the acquisition of listening, speaking, reading and writing of one language. Through comparing the features of two languages, some similarities and differences are presented. The contrastive analysis has also proven that L1 plays an important role in the acquisition of L2. More specifically, on the similar part, it will be easy for learners to acquire; as for different parts, learners will encounter more obstructions. It can be

concluded that learners should hold awareness of this vast influence and clear the mistakes of communication.

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