

## **Lexical-Semantic Transfer and Strategies for Teaching and Learning Putonghua Vocabulary for Cantonese-speaking Learners**

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### **ABSTRACT**

Language transfer refers to the language that learners apply to the knowledge of one language to the language that they are learning. According to Bransford (2000), “all new learning involves transfer based on previous learning.” Language transfer includes positive and negative transfer. Positive transfer means the previous knowledge that the language learner obtains from the first language----phonetics, grammar, expressions, and so forth to help the learner learn the new language, while negative transfer means the previous knowledge interferes with the learner’s ability to learn the new language. In the United States, the number of Cantonese speakers who choose to study Mandarin has grown increasingly. While a number of past studies have focused on the language transfer of the phonetics system of the two languages, few studies have paid attention to the semantics system. Cantonese and Mandarin belong to Sino-Tibetan languages family and shared similar characters and grammars, however, the meanings of words with similar characters are comparatively different. Generally speaking, Cantonese speakers encounter more difficulties when learning Mandarin because of this difference of semantics system. The present study focuses on the language transfer of the semantics system from Cantonese language to Mandarin Chinese (Putonghua). By adopting Contrastive Analysis Hypothesis method, the current study (1) analyzed the difference of the meaning of the vocabulary (973 words) from the book, “Great Wall Chinese textbooks”; (2) identified the positive and negative language transfer via comparing the meaning of the words in Cantonese and Mandarin; and (3) explored the strategies that Cantonese-speaking learner and L2 Mandarin Chinese teachers can use in Mandarin teaching and learning.

**KEY WORDS:** Mandarin Chinese (Putonghua), Cantonese, language transfer, lexical-semantic transfer, L2 acquisition

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## INTRODUCTION

Language transfer refers to the language that learners apply to the knowledge of one language to the language that they are learning. According to Bransford (1999), “all new learning involves transfer based on previous learning.” Language transfer includes positive and negative transfer. Positive transfer means the previous knowledge that the language learner obtains from the first language---phonetics, grammar, expressions, and so forth to help the learner learn the new language, while negative transfer means the previous knowledge interferes with the learner’s ability to learn the new language.

Cantonese and Mandarin belong to Sino-Tibetan languages family and shared similar characters and grammars. More than 300 languages and major dialects belong to this family. Chinese languages, also called Sinitic languages, Chinese Han, principal language group of eastern Asia, belonging to the Sino-Tibetan language family. Chinese exists in a number of varieties that are popularly called dialects but that are usually classified as separate languages by scholars. Most of the differences among them occur in pronunciation and vocabulary; there are few grammatical differences. These languages include Mandarin in the northern, central, and western parts of China; Wu dialect; Northern and Southern Min dialect; Gan dialect; Hakka dialect; Xiang dialect; and Cantonese (Yue) in the southeastern part of the country.

Cantonese language, Yueyu in Chinese, variety of Chinese spoken by more than 55 million people in [Guangdong](#) and southern [Guangxi](#) provinces of China, includes the important cities of Canton, [Hong Kong](#), and [Macau](#). Throughout the world it is spoken by some 20 million more. In Vietnam alone, Cantonese (Yue) speakers (who went there as soldiers and railroad workers) number nearly 1 million (Cantonese language, 2016).

Cantonese preserves more features of Ancient Chinese than do the other major [Chinese languages](#); its various dialects retain most of the final consonants of the older [language](#) and have at least six tones, in contrast to the four tones of [Modern Standard Chinese](#), to distinguish meaning between words or word elements that

have the same arrangement of consonant and [vowel](#) sounds. The language has fewer initial consonants than Modern Standard Chinese and about twice as many distinctively different syllables. Before the mid-20th century the majority of Chinese immigrants spoke Cantonese.

Written Cantonese is the written form of Cantonese, the most complete written form of Chinese after that for Mandarin Chinese. Written Chinese was originally developed for Classical Chinese, and was the main literary language of China until the 19th century. Modern Cantonese speakers have also developed their own written script, sometimes creating new characters for words that either do not exist or have been lost in standard Chinese.

In the United States, the number of Cantonese speakers who choose to study Mandarin has grown increasingly (See Figure 1), and more and more Cantonese speakers and their descendants attend Mandarin classes. In San Antonio, beginning in the mid-1850s until after WW II, America’s Chinese came almost exclusively from the old Kwangtung Province of China, now Guangdong and therefore spoke the various Cantonese/Toishan dialects of the Pearl River Delta. By the 1970s there was an influx of people speaking mainly Mandarin Chinese and this brought new challenges to the community. Most Chinese moving here now speak Mandarin, China’s main and official dialect. There are currently several different language schools. These facilities are teaching children Chinese language skills based on the pinyin Romanization popularized in Mainland China the traditional syllable system for Mandarin used in Taiwan, as well as Cantonese. Such weekend language schools are also a remarkable venue for the parents to socialize and organize for other activities (Brown).

Detailed Languages Spoken at Home and Ability to Speak English for the Population 5 Years and Over for United States: 2009-2013

	Number of speakers <sup>1</sup>	Margin of Error <sup>2</sup>	Speak English less than "Very Well" <sup>3</sup>	Margin of Error <sup>4</sup>
Population 5 years and over	291,484,482	3,340	25,140,900	63,553
<b>ASIAN AND PACIFIC ISLAND LANGUAGES</b>				
Chinese (incl. Cantonese, Mandarin, other Chinese languages <sup>5</sup> )	6,530,099	23,440	4,570,035	17,439
Chinese (incl. Cantonese, Mandarin, other Chinese languages <sup>5</sup> )	2,896,766	13,255	1,800,886	8,527
Chinese	1,807,485	13,075	1,054,885	8,576
Hakka	1,350	307	840	203
Kan, Hsiang	50	65	(0)	(0)
Cantonese	458,940	6,487	257,525	4,433
Mandarin	487,250	7,953	240,810	5,571
Fuzhou	1,450	455	1,175	416
Formosan	77,075	2,687	44,140	1,939
Wu	2,670	466	1,375	287

(2009-2013 American Community Survey)

Figure 1: Cantonese and Mandarin language spoken at home (2009-2013)

However, the meanings of words with similar characters are comparatively different. Generally speaking, Cantonese speakers encounter more difficulties when learning Mandarin because of this difference of semantics system. Many Mandarin teachers working with Hong Kong, Macau, and other overseas Cantonese-speaking Chinese learners also state that it is hard to find the appropriate study references and books that focus on the language difference training between Cantonese and Mandarin. Therefore, it is significant to find the differences between the two languages as well as efficient ways and strategies of teaching and learning the language(s).

**RESEARCH QUESTION**

Language transfer refers to language learners applying knowledge from one language to the new language. Language transfer is more common when a new language is similar to learners’ native tongue (Zhao, 2008). When there are significant differences between two languages, like English and Cantonese, language transfer is much more difficult. Semantics is the study of meaning that is used for understanding human expression through language. Word

formation refers to the ways in which new words are made on the basis of other words.

The focus of this research is to investigate lexical-semantic transfer, word formation, and to explore teaching and learning strategies for learning vocabulary (as seen in the Figure 2):

1. What positive and negative lexical transfers do Cantonese-speaking Putonghua learners learn from the textbook – *Great Wall Chinese (2006)*?
2. What strategies can be used by L2 teachers to teach Cantonese-speaking learners to learn Putonghua vocabulary?

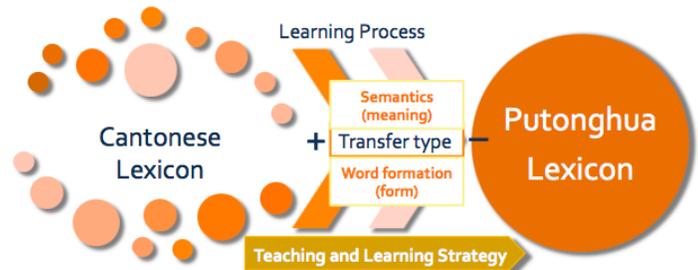


Figure 2: Research concept map

**METHODOLOGY**

Contrastive Analysis Hypothesis and Error Analysis Theory are two significant research methodologies in the study of language transfer. Error Analysis Theory focuses on comparing the errors that happened between the first language speaker (L1) and the language learners (L2). Contrastive Analysis Hypothesis focuses on comparing the language system between L1 and L2 to indicate the differences and reveal the language strategies that L2 speaker may use to avoid the errors.

The research project will adopt Contrastive Analysis Hypothesis to:

- (1) Lexical data collected from the vocabulary lists of *Great Wall Chinese textbook series(2006)*;
- (2) Data interpretation and classification by form and meaning;
- (3) Data analysis with focus on positive and negative semantic transfer during learning process.

## DATA COLLECTION AND REPORT

Great Wall Chinese textbooks include 1384 Mandarin words in the vocabulary list. The current study investigated the meanings of the vocabulary in Cantonese language with two native Cantonese-speaking Mandarin learners in the United States.

Sun (2012) indicated Cantonese words can be divided into three categories in terms of word formation compared to Putonghua:

1. Words existing in Cantonese but not in Putonghua (Cantonese community word)
2. Words existing in Putonghua but not in Cantonese (Putonghua community word)
3. Words existing in both Putonghua and Cantonese

According to the data that collected, the present study further divided each category into sub-categories (See in Table 1).

Category	Sub-category	#	Frequency	Example	
				Cantonese	Putonghua
Cantonese community word	Loan words	38	2.75%	ball	舞会
	Prefix and suffix	23	1.66%	地	们
	Ancient Chinese words	112	8.10%	晏晝	下午
Putonghua community word		156	11.27%	单车/自行车	自行车
Dual community word	False friends	100	7.22%	戏	电影
	Measure words	5	0.04%	次	遍
	Emotional words	10	0.07%	姑娘	护士
Non-community word		940	67.91%		

Table 1: Data report

1. **Cantonese community word:** Words existing in Cantonese but not in Putonghua
  - a) Loan words: adopted by the speakers of one language from a different language. Loan words are the words adopted by the

speakers of one language from a different language. Cantonese people borrowed a large number of English words. These words largely exist in Cantonese language (around 3% found in the data). Here are some of the examples: Club/俱乐部, Café/咖啡厅, Ball/舞会, Gym/健身中心, Taxi/出租车, Aerobic/健美操, Bus/公共汽车, Send/发, Jam线/占线, and so forth. This kind of words distribute unevenly in the 6 textbooks.

- b) Prefix and suffix: placed at the beginning/end of a word to modify its meaning. Prefix and suffix are the words that placed at the beginning/end of a word to modify its meaning. Prefix and suffix in Cantonese are also different from Mandarin. For example, 阿妈/mother, 阿嫂/sister in law, 家姐/older sister, 细妹/younger sister, 你地/you, and so forth. 阿, 家, and 细 are the prefix used to address the family members. 地 which refers to the earth in Mandarin helps form plural pronoun words in Cantonese.
- c) Ancient Chinese words: formed by Classical Chinese characters. Due to the historical reason and language movements, many monosyllabic words that used to be widely used in classic Chinese language have been less used or disappeared in the modern Chinese language. However, a large number of monosyllabic words have been preserved in Cantonese. Therefore, when Cantonese learners are learning Mandarin, these ancient monosyllabic words brought negative influence to them. These words are typically common and significant when studying a language, such as 唔/not, 系/to be, 喺/in. In the textbooks, such words have been greatly found in the vocabulary lists. For example, 由/from, 既/of, 同/and, 囡/daughter, 咩/what, 得/okay, and so on.

2. **Putonghua community word:**

These words exist in Putonghua but not in Cantonese. They can't be found in Cantonese. Language teachers need to be aware of the words

and introduce the differences to the Cantonese learners in order to avoiding the negative transfer, such as using interlanguage to help transfer the language. In the textbooks, we found some words in this situation. For example, 子女/children, 屋企/family, 黎/come, 𩇛/tired, 冇咩野/nothing, 听日/tomorrow, 果阵时/then, 返工/go to work, 训觉/sleep, 钟意/like, 依家/now, 柜桶/drawer, and so forth.

### 3. Dual community word

Dual community words are the words existing in both Putonghua and Cantonese.

#### a) False friends

False friends are the words in two languages that look or sound similar, but differ significantly in meaning. False friends are words in two languages that look similar, but differ significantly in meaning. False friends can cause difficulty for students learning a new language, particularly one that is related to their native language, because students are likely to identify the words wrongly due to linguistic interference. For this reason, teachers sometimes compile lists of false friends as an aid for their students. Here are some examples we found from the current data: 都/all, 姑娘/nurse, 边/which, 讲/talk, 饮/drink, etc. 姑娘 in modern Mandarin refers to the young lady, but in Cantonese, it especially means the nurse. 边 in Mandarin means the edge, but in Cantonese, it refers to which.

#### b) Measure words

Measure words are used together with numerals to indicate the quantity of a noun, and sometimes even of an action. The measure words in Cantonese are very different from Mandarin. Although it is easy to be understood in conversations between the two languages, it sounds incorrect in Mandarin. Thus, it is important to identify the differences of the usage of measure words between the two languages. For example, 堂/class, 点/little, 一阵见/see you later, and so on. The measure word 阵 in Mandarin is used for the actions which have lasted for a while, but in Cantonese, it means a while but does not specially refer to an action which has lasted for a while.

#### c) Emotional words

Emotional words are the words that have a positive, negative, or neutral connotation. We

found four words in the vocabulary lists which carry different emotions when Cantonese speakers study them. They are 伙计/waiter, 肥/fat, 骚扰/disturb, and 师父/master. 服务员 is used in Mandarin to call the waiters or waitress, but in Cantonese, the society still use the ancient word 伙计 in this situation. In Mandarin, the meaning of 伙计 has changed to call the male friends in informal settings nowadays. 胖 refers to fat in Mandarin, but Cantonese uses 肥 in stead. 肥 is a negative word to address the weight of a person in Mandarin. 打扰 means disturbing or bothering in Mandarin. Cantonese speakers use 骚扰 in this case. In Mandarin today, 骚扰 stands for harassment which is a pattern of repeated offensive behavior that appears to a reasonable observer to intentionally target a specific person or persons. 师傅 is used to call the experts with some skills such as taxi driver, carpenter, and japanner in Mandarin, but in Cantonese it refers to the master who is like a teacher-father (also written as 师父).

4. **Non-community word:** same in both meaning and form in two languages.

## RESULT

Many language teachers and linguistics have believed the similarities and dissimilarities in word forms, along with similarities and dissimilarities in word meanings, play a major role in how quickly a particular foreign language may be learned by speakers of another language (Odlin, p.77). If the two languages have features in correspondence, there will be “positive transfer”. If the patterns of the two languages do not coincide, there will be “negative transfer” (Arabski, p.12).

If based on the form feature of the words (See in Table 2):

Category	Sub-category	#	Frequency	Transfer Type
Cantonese community word	Loan words	38	2.75%	-
	Prefix and suffix	23	1.66%	-
	Ancient Chinese words	112	8.10%	-
Putonghua community word		156	11.27%	+
Dual community word	False friends	100	7.22%	+
	Measure words	5	0.04%	+
	Emotional words	10	0.07%	+
Non-community word		940	67.91%	+

Table 2: *Positive and negative transfer of the format of the words*

If based on the meaning feature of the words (See in Table 3):

Category	Sub-category	#	Frequency	Transfer Type
Cantonese community word	Loan words	38	2.75%	-
	Prefix and suffix	23	1.66%	-
	Ancient Chinese words	112	8.10%	-
Putonghua community word		156	11.27%	+
Dual community word	False friends	100	7.22%	-
	Measure words	5	0.04%	-
	Emotional words	10	0.07%	-
Non-community word		940	67.91%	+

Table 3: *Positive and negative transfer of the meaning of the words*

By adopting the method of constructive analysis hypotheses in the current research helps distinguish potential positive and negative in the vocabulary study (See Table 2 and 3). However, the conclusion and results need to be further tested in the following up study.

## DISCUSSION AND IMPLICATION

This is a pilot study on the language transfer of the Cantonese language when the Cantonese speakers learn Mandarin Chinese. The results discussed above indicate the potential aspects that the negative transfer happens when studying the Mandarin words. The finding will help the Cantonese-speaking Mandarin learners with their oral and writing skills of Mandarin.

Many Cantonese think Cantonese can be written and there will be no different from Mandarin, so they will use the Cantonese characters and ideology when writing Mandarin. However, some characters only exist in Cantonese language or some characters may have different meanings. On the other hand, Mandarin has a mature and fully developed writing system. What people write in Mandarin reflect what they speak. This study can provide a way of changing the Cantonese learners' ideology of learning and writing Mandarin.

Skehan (1989) suggests three broad domains:

1. Those which determine the learner's personal involvement in the learning process (e.g. seeking learning opportunities, behavioral strategies, setting aside regular practice times)
2. Those which enable learners to sort and organize the L2 data (cognitive strategies such as searching for patterns, mentally recalling and rehearsing L2 patterns, etc.)
3. Those which cause the learner to monitor his or her progress (meta-cognitive strategies such as checking performance against that of native speakers )

Ellis (1994) indicated "successful language learners pay attention to both meaning and form", and "adult learners usually use more cognitive strategies". For Cantonese-speaking learners, they need to recognize that these

cognitive strategies which will help them to study Mandarin.

Moreover, this study also provides unique cross-culture references for the foreign language/bilingual teachers. Many Mandarin teachers are not familiar with Cantonese language. The negative transfer found in this study could aid them to specify the errors the Cantonese speakers may have when study Mandarin.

According to the current research, teacher should use more cognitive strategies to help Cantonese-speaking learners. A cognitive strategy serves to support the learner as he or she develops internal procedures that enable him/her to perform tasks that are complex (Rosenshine, 1997). Because they are diverse and highly relevant to tasks, the use of cognitive strategies by teachers and students can significantly impact important learning outcomes for students.

We suggest the following strategies that are highlighted for teachers to teach Putonghua vocabulary to Cantonese speakers:

1. Elaboration strategy: help students expand target information by relating

other information to it (e.g. creating a phrase, making an analogy).

2. Transformation strategy: help students simplify target information by converting difficult or unfamiliar information into more manageable information (e.g. using American context, creating common knowledge/collective memory).
  3. Imagery strategy: help students transform target information by creating meaningful visual, auditory, or images of the information. (e.g. using image/video from Putonghua context)
  4. De-construction strategy: help students understand the semantic meaning of each Putonghua character (deconstruct), and create space for student to imagine the whole meaning of the target word in Putonghua.
  5. Organization strategy: help students categorize, sequence or otherwise organize information for more efficient recall and use.
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**REFERENCES**

- Arabski, J. (2006). *Cross-linguistic influences in the second language lexicon*. Buffalo, N.Y: Multilingual Matters.
- A Modern English-Chinese Dictionary*. (2003). Beijing: Foreign Language Teaching and Research Press.
- Bransford, J. (1999). *How people learn brain, mind, experience, and school*. Washington, D.C.: National Academy Press.
- Brown, M., & San Antonio Authors Collection. (2008). *TexAsia: San Antonio's Asian communities, 1978-2008*. San Antonio, TX: aLAMO(sic) Holdings Press.
- Bussmann, H., Trauth, G., & Kazzazi, K. (1996). *Routledge dictionary of language and linguistics*. New York: Routledge.
- Cantonese language. (2016). In *Encyclopædia Britannica*. Retrieved from <http://www.britannica.com/topic/Cantonese-language>
- Jiang, N. (2004). Semantic transfer and its implications for vocabulary teaching in a second language. *The Modern Language Journal [H.W. Wilson - EDUC]*, 88(3), 416.
- Johnson, K., & Johnson, H. (1998;1999;). *Encyclopedic dictionary of applied linguistics: A handbook for language teaching*. Malden, MA: Blackwell.
- Jordan, L. (n.d.). Cognitive Strategies. Retrieved February 1, 2016, from [http://www.specialconnections.ku.edu/?q=instruction/cognitive strategies](http://www.specialconnections.ku.edu/?q=instruction/cognitive+strategies)
- Language Spoken at Home for the Population 5 Years and Over: 2000. (n.d.). Retrieved from <https://www.census.gov/population/www/cen2000/briefs/phc-t37/index.html>
- Odlin, T. (1989). *Language transfer: Cross-linguistic influence in language learning*. New York: Cambridge University Press.
- Pishwa, H. (2009). *Language and social cognition expression of the social mind*. Berlin: Mouton de Gruyter.
- Rustipa, K. (2011). 16 Contrastive Analysis, Error Analysis, Interlanguage and the Implication to Language Teaching (Katharina Rustipa) Contrastive Analysis, Error Analysis, Interlanguage and the Implication to Language Teaching. *Jurnal Pengembangan Humaniora*, 11(1), 16-22.
- Sino-Tibetan languages. (2016). In *Encyclopædia Britannica*. Retrieved from <http://www.britannica.com/topic/Sino-Tibetan-languages>
- Sun, Y. (2013). Comparative Research on Hong Kong Community Words and Mandarin Words. *Journal of Wuling*, 38(1), 132-139.
- Xu, L. (2006). *Great Wall Chinese 5: Textbook : Essentials in communication*. Beijing: Language and Culture University Press.
- Zheng, C., & Li, Y. 2014. Report on Chinese teaching and learning in San Antonio, Texas USA. Research on the Development of Confucius Institute, 2(3), 84-92.