Memetic Calque of Chinese in English for Cross-cultural Communication:

A Corpus-based Study of Language Contact

Yihua Zhang

Guangdong University of Foreign Studies

Abstract

Culture-bound words of one language usually constitute barriers in cross-cultural communication. The present paper sets forth the nature and characteristics of borrowing and calque from the perspective of memetics and contact linguistics, and explores how China-specific words, together with their linguistic and cultural memes, are recognized, transferred, assimilated in cross-language communication through memetic calque. The discussion, based on the *China Related English Corpus*, centres on different features of borrowing and calque as the outcome of language contact, the similarities between calques and memes, and the processes of memetic calque through transliteration, transference, and reference. It is hoped that this approach may give a better account of the interaction between China-specific words and English, and provide an accessible way to eliminate barriers to cross-cultural communication.

Keywords

cross-cultural communication, China-specific words, language contact, calque, meme

1. Introduction

The language contact between English and Chinese languages has experienced a long history of evolution, as a result of early trade contacts of UK with China (Canton) in the 1630s. In recent decades, especially since the Belt and Road Initiative was proposed by China in 2013, the international exchanges between China and other countries have become more frequent than ever before in various domains such as politics, economy, diplomacy and foreign trade; English is in fact the main language for foreign-oriented publicity or international communication in China. However, due to the historical, cultural and social differences lots of China-specific words and expressions (CSW) do not have equivalents in English. And thus language contact usually induces linguistic change and transference from one language to the other. *China English*,[1] for example, as a result of language contact, includes quite a great

---

[1]   *China English* is here defined as a norm-based English variety used by Chinese people for international communication, with a lexis, pronunciation, syntax and discourse characterized by Chinese culture (cf.

number of CSWs, which affect considerably upon the form and content of normative English. And thus many researches are dedicated to the in-depth understanding of how those specific words are turned into English, but they have mostly focused on borrowing and translation, and on the techniques of translation. These studies have been typically based on a limited number of examples (Xu & Huo 2008, Zhao 2011, Ren & Ma 2014), ignoring the cognitive or behavioral patterns of both English and Chinese native speakers in the process of language contact. Thus, an integrated approach will be adopted in the following discussion, where the "calque power" in the formation of China English or CSW will be addressed from the perspective of contact linguistics and memetics, and the discussion will be based mainly on a large *China-related English Corpus* (CREC) and English Expression Database (EED) of CSWs; in other words all the CSWs are cited here from the Corpus and Database.

2. Borrowing or calque as means of cultural communication in language contact

When languages come into **contact**, either directly through the speakers of these languages, or indirectly through the media, one common outcome is the diffusion of cultural items across linguistic boundaries (Tsou 2001). The cultural diffusion, or rather cultural communication, which is used here to highlight the reciprocity of language contact effect, often gives rise to new lexical items in a recipient language. These new lexical items usually result from a replication or rather an imitation of models in the donor language through phonetic or semantic adaptations, including **calques** or **borrowings** (cf. Tsou 2001). Borrowings or loanwords are considered as an outcome of language contact in language maintenance situations (Winford 2003a, 2003b).

1) Borrowing versus calque in cross cultural communication

The notion of *language contact* is not languages themselves which come into contact but people who speak or write them. It occurs whenever two or more speakers who do not share the same language need to communicate (cf. Thomason 2001: 1).

Borrowing is simply an "adoption of a linguistic expression from one language into another language"(Bussmann 2000: 55) or "a word or phrase which has been taken from one language and used in another language" (Richards, Platt & Platt 2000: 50). This is a common phenomenon, for example, within the Indo-European language family, where a borrowed word is easily adaptable to the target language, since the forms of the languages are closely similar to one another, but it may be problematic between Chinese and English, because

---

Ge 1980, Wang 1991), while *Chinese English* as a variety of English or an interlanguage which results from language contact between Chinese and English (Kachru 1988, 1992; Eaves 2011).

Chinese is vastly different in form or morphology from English, and one can hardly take an English word and use it directly in Chinese communication, except for code switch in a particular situation. To make it clearer, we'll take a closer look at the borrowing and calque.

Borrowing has two typical characteristics: first, both the form and content of the source language are maintained intact. Of course, this only applies to similar languages (e.g. English *ballet* borrowed from French). Second, the source word is at times modulated according to the target language phonology in order to be better integrated into the target language, for example, *speaker* has been borrowed into French from English, but it is pronounced as /spikœ:r/ based on the pronunciation of the French suffix "-eur" (e.g. *docteur*).

In the traditional view, borrowing between different language families can only be confined to the phonetic level, and the written form cannot be copied. Even though, this is hardly a real borrowing, for example, the Chinese 布丁 is 'borrowed' from English *pudding*, and neither the writing nor the sound can be said to be strictly analogical between the two items. Therefore, code-switching often has to be employed in such situations. In fact, the CSWs, once transferred into English, have undergone considerable changes both in pronunciation and morphological structure, which does not conform to the above stated features of borrowing. Thus, the memetic and calque theory and methodology will be adopted to analyse the changes and features of CSWs while they are integrated into China English.

2) Meme versus calque and their comparability in cross-cultural translation

Memes, named in analogy with a gene, is considered as a cultural replicator, i.e. an element of culture such as a tradition, belief, idea, melody, or fashion that can be held in memory and transmitted or copied to the memory of another person (cf. Dawkins 1989, Heylighen & Chielens 2009). In fact, genes are propagated through inheritance to drive the process of biological evolution, while memes are through imitation as new replicators which, seen as analogous to *mind viruses* (Dawkins 1993, Brodie 1996), function as a contagious form of information that infects the human brain, with a cognitive or behaviour pattern replicated from one individual to another (Dawkins 2006 [1976]: 192–198). On other hand, calque is an effective means to guarantee the propagation of memes in cross-culture communication and to rebuild them in target languages. In other words, memes and calques constitute an operational approach to the drive of cultural evolution and the linguistic transference between Chinese and English, and may work well in describing the changes caused by language contact.

Calque has been adopted in translation for several decades, Al-Najjar (1989: 81–83) proposed three methods of translation based on calque: calque with extension, calque with reduction and calque with expansion and substitution, and then many other scholars

(Chansou 1984, Santoyo 1987, Smith 2006: 28–30, Thawabteh 2011, Karakoç 2014) are involved in calque translation research, and consider it as a way to translate neologisms, and to transmit new concepts to other language communities. In like manner, memetic translation has become a hot topic in recent years. Chesterman and Vermeer are the first to introduce memes into translation theory. Vermeer (1997), best known for establishing skopos theory, adopted memetic approach to his functionalist translation study. Chesterman (1997) refers to the concepts, norms, strategies and theory about translation as translation memes, and put forward five super-memes in translation meme pool, namely source-target meme, equivalence meme, untranslatability meme, free-vs-literal translation meme, and all-writing-is-translating meme.

From then on, lots of authors from the mainland of China adopted memetic approach to culture-bound word translation. For instance, He (2008) analysed the impact of language memes on translation and culture. Zhao (2012) probed into the cross-cultural communication in international publicity from the perspective of memetics in order to improve the image of China. Zhao (2013) believed that a successful meme re-replication and transmission by means of translation may communicate memes across language and culture. Many others are engaged in researches on application of memetics to English translation and translation teaching, e.g. memetic humor translation (Su 2013), memetic motivation and foreignizing strategy in translation (Ding 2014, Yin 2006), strategies of language meme translation (Li 2016), translation memetics and translation teaching (Ma 2005, Zhao 2016), and norm memes in English translation of classics (Li & Hu 2018), and so on.

We can see from the above that translation is a cross-cultural communication activity, and the process of translation is actually a kind of meme transmission, while the calque serves as a means to encode the original memes in the form of target language. More clearly, the term *calque* refers to the process of creating a word or syntactic construction through borrowing the meaning or morphological structure from another language,[2] while meme is the basic unit of linguistic and cultural communication (Heylighen 1992) to be calqued. In other words, a calque is a new word formed in the target language by memetically imitating the structure or semantic features of the original word in the source language. A calque is distinct from borrowing proper, where the term is integrated into the language which has borrowed it as its original.[3]

---

[2]　*Trésor de la langue française*: Procédé de création d'un mot ou d'une construction syntaxique par emprunt de sens ou de structure morphologique à une autre langue. Available at http://atilf.atilf.fr/.

[3]　*Dictionnaire de Linguistique*: Le calque se distingue de l'emprunt proprement dit, où le terme étranger est intégré tel quel à la langue qui l'emprunte.

The essence of calque in language contact is memetic imitation rather than duplication or copying. For example, in syntactic calque, the expression in the target language should be built based on syntactic pattern and function of the source language, e.g. *it goes without saying* is calqued from French *ça va sans dire*, while *ce n'est pas ma tasse de thé* in French is calqued from *it's not my cup of tea*.

CSWs are bound with rich Chinese culture and tradition, which should be transferred while they are transmitted into English in the course of language contact. From the point of view of memetics, the basic unit of cross-cultural communication is the meme, and calques seem inevitable (to transfer and rebuild the memes) when two languages are in contact (Galstyan & Sirakanyan 2015). And on the other hand, a language is itself a kind of meme (Cheng & Zhang 2015). If language A lacks either representational content or expressional form as equivalent to that of language B, the latter is likely to be imitated by the former due to the interaction of language memes. In this process calque or imitation is the essential channel for meme transmission, which enables us to express new thing and new ideas, usually with exotic patterns in a rather natural way within our language; as Blackmore (1999: 3) said, "imitation comes naturally to us humans". Thus language contact is a source of linguistic changes, which are represented as calques or calque translation in real cross-cultural communication and can be found in CREC.

3) Extraction of CSWs from China-related English Corpus

The CREC is a 100 million word collection of written English texts about China, which consists of three sub-corpora. The Sub-corpus 1 (SC-I) contains texts from native English web media and books concerning China and Chinese culture; the Sub-corpus 2 (SC-II) comprises texts collected from domestic English web media, English books written by Chinese natives, and the English versions of Chinese books. The third one is a specialized corpus of *The Chinese Repository* (also regarded as a part of SC-I), an English periodical edited by the American missionaries Bridgman (1801–1861) and Williams (1812–1884). It was published in Canton between May 1832 and 1851, which reflects the primary stage of Language contact between Chinese and English. (see Fig. 1).

Fig. 1 Material sources of China-related English Corpus
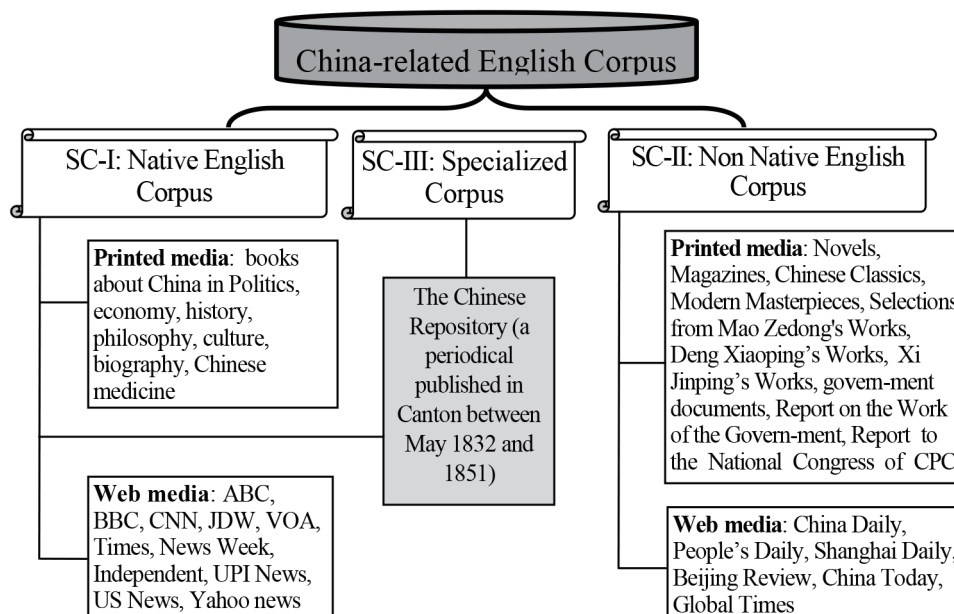
All the books or texts are selected according to their relatedness to China and China's affaires through a series of selection procedures. The composition of language materials in the corpus is shown in Table 1.

Table 1 Composition of language materials in CREC

Sources	Number of	SC-I	SC-II	Sub total
Printed matters	Texts	266	139	405
	Tokens	22560226	9829201	32389427
Web matters	Texts	40714	135514	176228
	Tokens	24912300	56403751	81316051
Chinese repository	Texts	19		19
	Tokens	5145835		5145835

The CSWs are extracted from the corpus to form an English Expression Database (EED) of CSWs (中國特色詞英語表達資料庫). After a process through automatic segmentation, screening and manual intervention, we've got about 20 thousand CSWs, which are classified into three categories: a) Words or expressions that originated in China-specific culture, society and convention, and refers to things, events, and phenomena specific to China; b) Typical expressions found in Chinese environment, including China-specific concepts, political

terms, phrases and words symbolizing Chinese national culture; c) Lexical sequences whose constituents are not specific to China, but seen as a whole produce expressions and cultural connotations that differ from original words or foreign languages, forming a unique part of Chinese language and culture. And then 1251 high frequency CSWs were extracted from the database to figure out their semantic distribution. (see fig. 2)

In order to have a panoramic profile of Chinese borrowing in English, the EED also includes Chinese loanwords in *Oxford English Dictionary*, *A New Webster Third International Dictionary* and Cannon's List of *Chinese Borrowings in English*. All the examples in following sections are cited from the Database.

Fig. 2 Semantic Distribution of China-specific Words in CREC
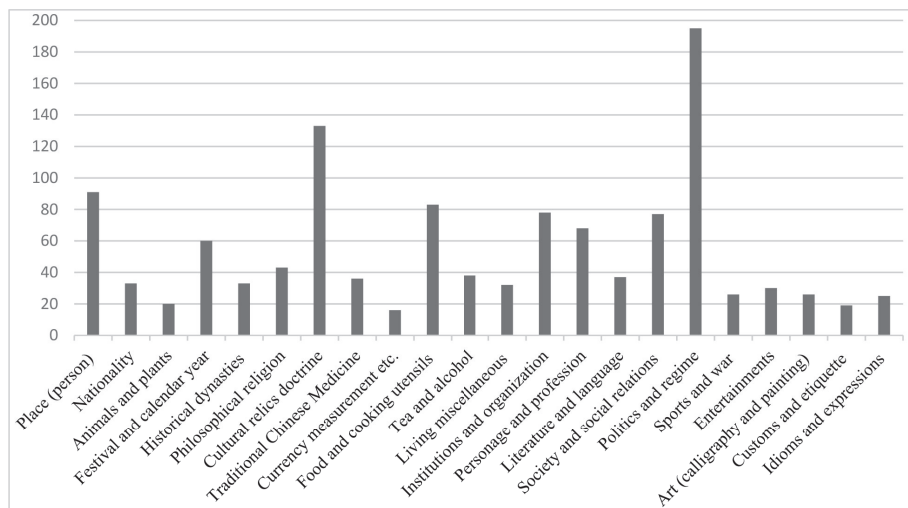
3. Memetic calque through transliteration

Transliteration is considered here as an approach to phonological calque, which incorporates Chinese phonetic memes (or phone-memes) into English trough imitation. In this case, the native English sound is maintained but is changed to a greater or smaller extent by adopting the Chinese phone-memes. More specifically, the calques are realized through memetic imitation based on Latin alphabet, Wade-Giles transcription, and Chinese phonetic alphabet (Pinyin), shown as follows.

1) Phonological calque in Latin alphabet

In the early stage of contact between Chinese and English, CSWs were characterized by Canotnese due to the fact that Canton was the unique open port under Canton System[4] at that time; and the outcome of contact was Canton English, although whose pronunciation and spelling were mainly based on Matteo Ricci's *Latin Alphabet Spelling Scheme for Chinese Characters*, and various translation works, grammar books and dictionaries by Morrison. Here are some examples calqued in Latin alphabet:

> chen shu (正書 2), Confucius (孔夫子 6540), kongfu (功夫 17), Feng shui (風水 694), ginseng (人參 699), nien hao (年號), san hsien (三弦 5), kumquat (金桔 14), whangee (黃籬竹 3), and T'ai Chi (太極拳 692)[5]

The spelling of these words are characterized by the Canton local dialect, as Cantonese (among other Southern dialects) phonetic memes are transferred into English by imitation due to memetic interaction in language contact, and the written forms are left out.

2) Phonological calque in Wade-Giles transcription

The Wade-Giles Romanization System began in 1867. The phonetic transcription inherited some characteristics of Morrison's phonetic system, and simplified the notation, so that the notes can approximate English pronunciation. As a matter of fact, British and American sources or media tend to use phonological calque instead of free translation. Here are some typical examples:

> Kong fu (功夫 2089), gung ho (工合 26), hutung (胡同 41), I Ching (易經 215), Kaoliang (高粱酒 44), Kuomintang (國民黨 4295), Kuo-yü (國語 5), Tsingtao (青島 啤酒 221), pao-tzu (包子 11), wenyen (文言), and yang-ko (秧歌 3)

The above CSWs are spelled on the phonetic model of Chinese based on Wade-Giles Romanization, where Chinese phone-memes with characteristics of Peking Mandarin are transferred into English by imitation. That is, the Romanization spelling functions as an English phonetic expression to communicate the phone-meme of Chinese words.

3) Phonological calque in Chinese phonetic alphabet

After the issuance of the *Scheme For Chinese Phonetic Alphabet* in 1958, Wade-Giles Romanization was considered as obsolete in the mainland of China. However, people

---

[4] Before signing of the *Treaty of Nanjing* in 1842, the Qing government issued a policy that Western merchants could only trade in Guangzhou, known as " 一口通商 (Canton System)".

[5] In the brackets, the numbers are their token frequency in the Corpus, and those without or with little frequency are included in OED.

continue to use the old transcription in foreign-oriented translation, and Wade Giles-based Chinese loanwords in English are still in use, which has resulted in a two-way situation of phonetic transcription. Some Chinese "loanwords" included in *Oxford English Dictionary* (OED) after 1958 can illustrate this point, e.g. A) Wade Giles System: *Nei kuan* (內關 *1959*), *ta tzu-pao (大字報 1960)*, *kwai-lo (鬼佬 1969)*; B) Chinese Phonetic Alphabet System: *Mao-tai (茅臺 1962)*, *Pinyin (拼音 1963)*, *qipao (旗袍 1965)*, *Shaolin (少林 1974)*.[6]

In 1982, the International Organization for Standardization issued a standard named *Literature work----Chinese spelling of the Roman alphabet* (ISO 7098-1982), which has determined the position of *Chinese Pinyin* as the international standard for spelling CSWs. And then the Chinese phonetic alphabet is popularized rapidly, many of the words originally transliterated in Romanization transcription have been turned into Pinyin-based phonetic calques, such as: *Peking→Beijing*, *Tsingtao→qingdao*, *Shaoshing→shaoxing*. Some culture bound common words have also shifted to spelling on the model of Mamdarin phone-meme, e.g., *ta tzu-pao→dazibao*, *tao→dao*, *hutung→hutong*, *tangpu→dangpu*. In recent years, an increasing number of CSWs have been phonologically calqued in Pinyin: guanxi (關係 845), hukou (戶口 2834), dama (大媽 188), tuhao (土豪 158), gaokao (高考 655), gan bei (乾杯 26). It should be noted that some names of old places and institutions still use non-Chinese alphabet spelling, because they were originally calqued in traditional Romanization transcription, and are very famous and frequently used in international communication, e.g. *Peking University (1989)*, *Tsinghua University (1573)*, and *Hongkong (3161)*; while 廣州 and 廈門 both have two English versions: *Guangzhou/Canton (7909/12858)*, *Xiamen/Amoy (1896/1741)*, where the former is Pinyin, while the latter is traditional transliteration based on a Chinese dialect phone-memes.

4. Memetic calque through semantic and phonological transference

Transfer in language contact is a replication or rather an imitation of some memetic feature such as a lexical item or a linguistic structure in one language on the basis of another; just as Kachru (1992) said a non-native English speaker's native linguistic and cultural life may be transferred to English. The transference may be represented by calque translation, which is the most frequent strategy in translating compound words or collocations with specific language or culture memes.

　　1) Semantic calque

Semantic calque is a process and result of the transference of a semantic meme or unit of meaning (rather than lexical items or morphemes) from another language, because the source

---

[6]　　The examples are cited from the Database (OED), and the figures in brackets are the date of their appearance.

and target words between which this transference occurs show certain formal or semantic analogy, i.e. both words must share a primary semantic meme (conceptual meaning), and the SL word transfers a new meaning, usually metaphorical, to the TL word, whose original semantic meme (range) is thus extended. For example:

> iron rice bowl (鐵飯碗 152), golden lily (金蓮 32), barefoot doctor (赤腳醫生 85), Great Leap Forward (大躍進 1476), sugar-coated bullets (糖衣炮彈 11), paper tiger (紙老虎 107), crow's mouth (烏鴉嘴 35), red tourism (紅色旅遊 118), autumn bite/ autumn-eating (咬秋 13), ride a tiger (騎虎難下 15)

The concepts behind the individual words in English expressions correspond to their Chinese counterparts; however, when the elements are combined, the whole expression, even the constituents themselves, is endowed with a unique Chinese cultural meaning. In this case, the basic unit of cultural transmission is a semantic meme which is embodied in a source language speaker's cognitive or behavioural pattern and transferred to target language individuals through these calques. For example, *an iron rice bowl* is very hard to break, and metaphorically refers to a secure job and income. A *golden lily* does not refer to the plant, but draws a metaphorical meme from it: a woman's feet bound according to the custom in feudal China. *Bite-the-autumn/autumn-eating* seems meaningless to non-Chinese speakers, but in fact it marks a Chinese traditional custom: eating watermelons at the Beginning of Autumn can prevent the loosening of bowels in the coming winter and spring.

These English terms are hardly intelligible to Westerners coming across them for the first time, and it seems hard to find better ones to express the symbolic meaning or cultural meme of Chinese equivalents because of the cultural and metaphorical differences between Chinese and English. Some of them, however, show room for improvement. For example, 鐵飯碗 can be dealt with as follows: *iron rice bowl* (a secure job and income); 金蓮 : *golden lily* (woman's bound feet in feudal China); 咬秋 : *autumn bite* (eating watermelons at the beginning of autumn so as to prevent disease).

2) Phono-semantic calque

This refers to the cross-language mapping between expressional and conceptual schemas. Not only the pronunciation of the source language gets transferred, but also the concept is conveyed. Phono-semantic calque can fall into the following two types according to its formation structure:

A) In the typical phono-semantic calque translation, each morpheme in the target language is involved in the mapping or transference of the pronunciation and meaning of the source language. This type of calque is frequently seen from English to Chinese, for example, *Milton*→ 眠爾通 , *Halcio*→ 酣樂欣 , *pank*→ 龐客 , *gene*→ 基因 . In this way, not only is the

euphony of the source language retained, but also the semantic meme is conveyed. However, only a few instances are found from Chinese to English, e.g., *fool you (忽悠)*, *Go Believe (狗不理)*, and *no Z-turn (不折騰)*.

These words do not seem to conform to the rules of English at first glance, but they embody real human experience from the perspective of cognitive linguistics: language constructions are usage-based, and grammar formation is not rule-based, but rather grounded in actual usage events (Goldberg 1995, Eskildsen & Cadierno 2007). In fact, the above phono-semantic calques do give very clear meanings in China English.

Another variety of phono-semantic calque pertains to some commodities named after their place of origin, brand and trademark, and it represents both the phone-memes and semantic memes of source words. For example: *Bohea (武夷茶 82)*, *congou (功夫茶 6)*, *Hyson (熙春茶 33)*, *Keemun (祁門茶 30)*, *Oolong (烏龍茶 133)*, *Pekoe (白毫茶 32)*, *Maotai (茅臺酒 112)*, *Tsingtao (青島啤酒 126)*, etc.

The above calques preserve the essential phone-memes of the original words and the corresponding meanings are simultaneously integrated into the sound, which forms a phono-semantic memeplex.

B) The source language is a compound word or a multi-word term; the target language uses one morpheme to replicate the phone-meme and another to convey the essential semantic meme of the source expression. In contact linguistics, this is usually called **loan blend** – one part of a word is transferred from the source language and the other belongs to the original language. For example:

Taikonaut (太空人 164), Wechat (微信 2622), teahouse (茶館 734), silkworm (蠶 317), Lamaism (藏傳佛教 44), chinaware (陶瓷器 62), chopstick (筷子 868), Daoism (道教 502), neo-Confucianism (新儒家 665), Chimerica (中美共同體 137), Chindia (中印一體 356).

3) Phono-morphological calque

In this case, not only are the (part or whole) phone-memes and morph-memes of the source language retained but also the specific semantic memes are transferred. It is well-known that there is no formal variation in Chinese words or characters; semantic expansion is usually based on the addition of invariant morphemes (characters) to a basic word, so as to form a new expression as a replication of original memes.

A) Personal names: Since the word entered English in 1837, *Confucius* has been expanded to *Confucian (儒家的 8622)*, *Confucianism (儒教 8622)*, and *Confucianist (儒家 311)*. Similarly, from *Sun Yat-sen* to *Sun Yat-senism (三民主義 21)*, *Sun Yat-senist (三民主*

義者 25)*; from *Mao* to *Maoism* (*毛澤東主義 341*), *Maoist* (*毛澤東主義者 2997*), as well as the verb *maoize* (*毛澤東主義化 16)* and noun *maoization* (*毛澤東主義化 17)*.

B) Place names: *Japan* (*日本*) and *Sino-* (*秦，中國*) entered English in the 1570s through Portuguese and German, and in 1879 through Latin (Sinæ), respectively. The two words have generated quite a large number of new words through phono-morphological calque of original memes due to the flexibility of Chinese word formation and by means of English morphological inflection. For example, **Sino-**: *Sinic* (*中國的 282*), *Sinitic* (*中國文化的 23*), *sinicization* (*n 中國化 202*), *sinicize* (*v 中國化 80*), *sinify* (*v 使中國化 19*), *sinification* (*n 中國化 33*), *Sinogram* (*漢字 11*), *Sinology* (*漢學 135*), *Sinologist* (*漢學家 418*), *Sinologue* (*漢學家 147)*, etc.

C) Common words: In the early Sino-British trade, *tea*, *silk* and *ceramics* enjoyed an important position, and thus they were also popular topics in Chinese-English language communication; each of them formed a lexical category with specific characteristics. The word *tea* is richly represented in hundreds of compound words, but not in morphological derivation (only a few instances are found: *tealess*, *teaette*, *teaer*). *Silk* and *kaolin* have not only given rise to many compound words, but have also exhibited a natural propensity for word formation through morphological calque of original memes. For example, **silk**: *silky* (*絲的 148*), *silked* (*穿絲的 27*), *silken* (*絲制的 155*), *silkily* (*有光澤地 17*), *silkiness* (*柔軟光潔 56*), *silking* (*絲紋 51*), *silkete* (*絲光 39)*, etc.

5. Memetic calque through reference and syntactic calque

5.1. Referential calque of memeplex

If neither the referents nor the expressional forms of SL words are available in English, the only solution is to map the conceptual meme (referential content) into the English expression; this process is called referential calque. In this case, the mere purpose of the calque lies in conceptual meme and referent. According to the structural features of the source language, referential calque can be classified into two types.

1) Simple referential calque: This type covers mainly culture-bound terms or those resulting from new discoveries, new things or phenomena in the source culture.

steamed bun (271)← 饅頭 , steamed stuffed bun (15)← 包子 , Chinese dragon (93)← 龍 , Buddhist Temple (462)← 寺 , Chinese gong (12)← 鑼 , thin and tough silk (11)← 絹 , Chinese lacquer (26)← 生漆 , mandarin duck (110)← 鴛鴦

The above referential calque is characterized by the fact that the morph-memes or individual items of English multiword have no corresponding relationship with those of Chinese

expressions; however, as a whole they are equivalent to each other in referential content or memeplex in physical world. Therefore, terms such as *steamed bun*, *Imperial Academy*, *Lunar New Year* are not literal translation of Chinese words, but are calqued according to conceptual meme of the source language (Chinese). One must know the referent or referential content of the whole expression in order to understand its meaning.

2) Compound referential calque: The morphological memes or memeplex in the physical world of source compound terms are missing in English, yet a similar *signifier* and *signified* of individual memes or at least one of the compound words can be found in English; and then the calque can be made on the referents of their constituent parts in order to rebuild their semantic memeplex.

spring roll (110)← 春捲 , glutinous cake for new year (16)← 年糕 , foreign devil (130)← 洋鬼子 , opening up policy (353)← 開放政策 , dragon boat (475)← 龍船 , giant pandas (2164)← 大熊貓 ; dragon lantern dance (37)← 龍燈舞 , lion dance (199)← 獅子舞 , puppet show (85)← 木偶戲

The characteristics of this type of calque are quite different from simple referential calque. The individual morph-memes of the English expressions have corresponding relationships with those of Chinese expressions; even though the conceptual meme as a whole is absent from the target language, the referential content remains intelligible. Thus, one must know the referent or referential content of individual words of the expressions in order to form a holistic schema and referential meaning in one's mind, and rebuild the semantic memeplex in the target language.

5.2. Syntactic calque of memeplex

From the perspective of linguistic contact, the calque is an effective approach for guaranteeing coordination between language maintenance and transference, which enables culture-bound Chinese words or specific terms to be integrated into *China English* in a smooth way. Apart from the types discussed above, there is also syntactic calque in *China English*. Here are some typical examples: *long time no see (好久不見 91)*, *to sit the month (坐月子 19)*, *to lose face (丢面子 235)*, *to save face (保面子 116)*, *to pay a New Year visit (拜年 26)*, *to eat from the same big pot (吃大鍋飯 17)*, *to ride a tiger (騎虎難下 15)*, *and to fool you (忽悠 12)*.

The above English phrases are exactly equivalent to their Chinese counterparts in terms of syntactic meme (pattern). The calque translation has strong language vitality; it can assume fidelity to the source language and conform to the word formation rules of English in describing new things and phenomena. Thus, many words derived from calque transference are included in English dictionaries. But just like the semantic calque, the meaning of

syntactic calque is not transparent at times, and in this case an annotation would be needed. For example, 吃大鍋飯 can be dealt with as: *to eat from the same big pot* (egalitarian practice of distribution), 騎虎難下 as: *to ride a tiger* (used to describe an awkward situation where the thing is very difficult to deal with, but you cannot stop doing it).

It is evident that, memes can in principle be transmitted between any individuals involved in cross-language contact at various linguistic levels, and one single linguistic or cultural meme may be perceived and replicated by numerousindividuals from other language communities, and thus it is very likely for memes to undergo variation, as Heylighen and Chielens (2009) stated the information in the nervous system is more plastic than that in the DNA. That is why *calque* rather than *borrowing* is used here to describe the motivation and formational mechanism of CSWs.

6. Conclusion

In the analysis of calque, not only linguistic and cultural memes, but also the social and biological (sensory-motor) nature of language, are taken into account. Thereby its explanatory power for contact-induced change is enhanced, and the conditions and circumstances of linguistic contact become clearer. Without the participation of social, historical and cultural memes in the account of culture-bound words in language contact, CSWs could not be decoded, memorized and put into use by native speakers of English in the form of language memes, and thus could not reside in the hosts' minds as a linguistic memeplex. Calque embodies well the transmission process and outcome of linguistic and cultural memes. A corpus-based study of calque offers a comprehensive view of the internal structure of culture-bound words in China English, which allows better comprehension and assimilation of related linguistic and cultural memes, and contributes to the evolution of China English into a well-established English variety.

References

Al-Najjar, Majed. 1989. Linguistic methods for translating non-Arabic signifiers into Arabic. In A. Shunnaq, C. Dollarup & M.Saraireh (eds.), *Issues in translation*, 77–94. Amman: Irbid National University and Jordanian Translators' Association.

Blackmore, Susan. 1999. *The Meme machine*. Oxford: Oxford University Press.

Brodie, Richard. 1996. *Virus of the mind: The new science of the meme*. Seattle: Integral Press.

Bussmann, Hadumod. 2000. *Routledge dictionary of language and linguistics*. Beijing: Foreign Language Teaching and Research Press.

Chansou, Michel. 1984. Calques et créations linguistiques. *Meta: Translators' Journal* 29(3). 281–285.

Cheng, Wenwen & Xiancheng Zhang. 2015. Meme theory and Chinese-writing teaching in TCFL. *Higher Education of Social Science* 8(5). 61–65.

Chesterman, Andrew. 1997. *Memes of translation: The spread of ideas in translation theory*. Amsterdam: John Benjamins.

Dawkins, Richard. 1989. *The selfish gene*, 2nd edn. Oxford: Oxford University Press.

Dawkins, Richard. 1993 Viruses of the mind. In B. Dahlbom (ed.), *Dennett and his critics: Demystifying the mind*, 12–27. USA: Blackwell.

Dawkins, Richard. 2006 [1976].*The selfish gene*. Oxford, New York: Oxford University Press.

Ding, Ximin. 2014. An interpretation of the alienation motivation based on memetic theory and the choice of translation strategies. *Social Science Forum* 10. 77–82.

Eaves, Megan. 2011. English, Chinglish or China English?: Analysing Chinglish, Chinese English and China English. *English Today* 27(4). 64–70.

Eskildsen, Søren Wind & Teresa Cordierno. 2007. Are recurring multi-word expressions really syntactic freezes? Second language acquisition from the perspective of usage-based linguistics. In M. Nenonen & S. Niemi (eds.), *Collocations and idioms 1. Papers from the First Nordic Conference on Syntactic Freezes* (41), 86–99. Joensuu, Finland: Joensuu University Press.

Galstyan, Anahit & Tamara Sirakanyan. 2015. Indirect Borrowings in Armenian. YSU Academic journals. http://publications.ysu.am/wp-content/uploads/2015/12/Galstyan_Sirakanyan.pdf (accessed 26 December 2017).

Ge, Chuangui（葛傳椝）. 1980. Mantan you HanyiYing wenti 漫談由漢譯英問題 *Zhongguo Fanyi* 中國翻譯 2. 1–8.

Goldberg, Adele Eva. 1995. *Construction: A construction grammar approach to argument structure*. Chicago: The University Chicago Press.

He, Ziran. 2008. On memes and memetics in language. *Goyouron Kenkyuu* 語用論研究 10. 71–82.

Heylighen, Francis. 1992. Selfish memes and the evolution of cooperation. *Journal of Ideas* 2. 77–84.

Heylighen, Francis & Klaas Chielens. 2009. Cultural evolution and memetics, article prepared for the *Encyclopedia of Complexity and System Science*. https://bsahely.com/wp-content/uploads/2017/11/Memetics-Springer.pdf (accessed 26 December 2017).

Kachru, Braj Bihari. 1988. The sacred cows of English. *English Today* 16. 3–13.

Kachru, Braj Bihari. 1992. Teaching world Englishes. In B.B. Kachru (ed.), *The other tongue*, 355–365. Urbana: University of Illinois Press.

Karakoç, Nihal Yetkin. 2014. Structural calques in neologism translation and untranslability: The case of generation X. *Turkish Studies - International Periodical for the Languages, Literature and History of Turkish* 9(3). 1611–1619.

Li, Jiachun（李家春）. 2016. Xifang zhuliu meiti jiangou Zhongguo xingxiang yuyan moyin fanyi celüe 西方主流媒體建構中國形象語言模因翻譯策略 *Heilongjiang Shehui Kexue* 黑龍江社會科學 1. 125–128.

Li, Yuying & Wandi Hu. 2018. On the norm memes in English translation of classics — A case study of the translation of the works by Jiangxi native literati in the Song dynasty. *Theory and Practice in Language Studies* 8(6). 629–634.

Ma, Xiao（馬蕭）. 2005. Cong moyin dao guifan: Chesterman de fanyi moyinlun shuping 從模因到規範——切斯特曼的翻譯模因論述評 *Guangdong Waiyu Waimao Daxue Xuebao* 廣東外語外貿大學學報 3. 53–56, 61.

Ren, Dongsheng（任東升）& Ting Ma（馬婷）. 2014. Hanyu jingdian fayin "Zhongguo Yingyu" de wenhua zhuti diwei 漢語經典翻譯"中國英語"的文化主體地位 *Dangdai Waiyu Yanjiu* 當代外語研究 2. 40–44.

Richards, Jack. C., John Platt & Heidi Platt. 2000. *Longman dictionary of language teaching and applied linguistics*. Beijing: Foreign Language Teaching and Research Press.

Santoyo, Julio Cesar. 1987. Traduction, fertilisation et internationalisation: Les calques en espagnol. *Meta: Translators' Journal* 32(3). 240–249.

Smith, May. 2006. *The influence of French on eighteenth century literary Russian*. Oxford, Berlin: Peter Lang.

Su, Yihua（蘇奕華）. 2013. Gongneng fanyi lilun shiyu zhong yuyan moyin youmo de fanyi 功能翻譯理論視域中語言模因幽默的翻譯 *Waiyu Xuekan* 外語學刊 3. 90–94.

Thawabteh, Mohammad Ahmad. 2011. The other side of the coin of lexical borrowing from Arabic into English. *Transcultural* 1(4). 103–122.

Thomason, Sarah Grey. 2001. *Language contact: An introduction*. Washington, DC: Georgetown University Press.

Tsou, Benjamin. 2001. Language contact and lexical innovation. In M. Lackner, I. Amelung & J. Kurtz (eds.), *New terms for new ideas: Western knowledge and lexical change in late imperial China*, 35–56. Leiden: Brill.

Vermeer, Hans Josef. 1997. Translation and the 'meme'. *Target* 9. 155–66.

Wang, Rongpei（汪榕培）. 1991. Zhongguo Yingyu shi keguan cunzai 中國英語是客觀存在 *Jiefangjun Waiyu Xueyuan Xuebao* 解放軍外語學院學報 1. 1–8, 56.

Winford, Donald. 2003a. *Introduction to contact linguistics*. Oxford, Malden, MA: Blackwell Publishing.

Winford, Donald. 2003b. Contact-induced changes – Classification and processes. *OSUWPL* 57. 129–150.

Xu, Jun（徐珺）& Yuehong Huo（霍躍紅）. 2008. Dianji Yingyi: Wenhua fanyiguan xia de yihua celüe yu Zhongguo Yingyu 典籍英譯：文化翻譯觀下的異化策略與中國英語 *Waiyu Yu Waiyu Jiaoxue* 外語與外語教學 7. 45–48.

Yin, Pi'an（尹丕安）. 2006. Moyinlun yu fanyi de guihua he yihua 模因論與翻譯的歸化和異化 *Xi'an Waiguoyu Xueyuan Xuebao* 西安外國語學院學報 1. 39–42.

Zhao, Dejin. 2013. A tentative study of cultural translation from the perspective of memetic-adaptation. *Overseas English* 7. 151–153.

Zhao, Lili（趙麗麗）. 2016. Jiyu moyinlun de guanlian lilun zhidao xia fanyi jiaoxue shijian 基於模因論的關聯理論指導下翻譯教學實踐 *Zhongguo Jiaoyu Xuekan* 中國教育學刊 S1. 109–111.

Zhao, Qi（趙琦）. 2011. Lun Zhongguo Yingyu yu shizheng shuyu de HanYing fanyi 論中國英語與時政術語的漢英翻譯 *Guangxi Shifan Xueyuan Xuebao*, zhexue shehui kexue ban 廣西師範學院學報（哲學社會科學版） 2. 127–130.

Zhao, Shiyi（趙式一）. 2012. Moyinlun shiyu zhong de waixuan fanyi 模因論視閾中的外宣翻譯 *Shanxi Daxue Xuebao*, zhexue shehui kexue ban 山西大學學報（哲學社會科學版） 35(2). 137–140.

漢語模因仿造詞在英文跨文化交際中的運用
——基於語料庫的語言接觸研究

章宜華

廣東外語外貿大學

提要

文化負載詞通常會給跨文化交際造成障礙。本文從模因論和接觸語言學的角度分析了借詞和仿造詞的本質特徵，探討了中國特色詞及其語言文化模因如何在國際交流中通過模因仿造得到認可、遷移和吸收。本研究以涉華英語語料庫為基礎，分析借詞和仿造詞作為語言接觸產物的不同特徵，仿造與模因之間的相似性，以及通過語音、遷移和指稱進行模因仿造的過程；以期能更好地說明漢—英語言間的相互影響，為消除跨文化交際障礙提供可行的方法。

關鍵詞

跨文化交際，中國特色詞，語言接觸，仿造詞，模因