Emotion categorization and early bilinguals : a study of Chinese-English bilinguals' understanding of the shame category

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EMOTION CATEGORIZATION AND EARLY BILINGUALS: A STUDY OF CHINESE - ENGLISH BILINGUALS' UNDERSTANDING OF THE *SHAME* CATEGORY

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ABSTRACT

Past studies show that different cultures/languages socialize speakers into different manners of interpreting and categorizing emotional experiences (Wierzbicka, 1986; 1999). The present thesis investigates how emotions are categorized for bilinguals who have access to two distinct language systems with culture- and language-specific features. Do bilinguals maintain two sets of categorization systems, or do they have one system that incorporates features of both languages? To date, not many studies have empirically examined how bilinguals categorize emotional experiences, and the majority of studies on emotions examine late or sequential bilinguals rather than early bilinguals. As an attempt to bridge the above research gap, this dissertation examines how Chinese-English early bilinguals understand *shame*, as *shame* is categorized very differently in Chinese and English (e.g., Li, Wang & Fischer, 2004; Shaver, Wu & Schwartz, 1992).

The measurement used included a free listing task, a similarity sorting task, and a semantic profile questionnaire, as well as an individualism and collectivism questionnaire. The results show that early bilinguals' two categorization systems mutually influence each other, leading to commonalities in three dimensions: the prototypical *shame* expressions, the semantic structures formed by the prototypical *shame* expressions, and the semantic features associated with these central *shame* expressions. Moreover, the results provide empirical evidence that bilinguals' *shame* categorization is an ongoing dynamic process influenced by their language preference (for expressing emotions), language dominance, and culture orientations. First, bilingual participants list more prototypical *shame* members in their preferred language. Second,

bilingual participants who prefer Mandarin Chinese have more elaborate semantic structures for *shame* in both languages, while those who prefer English have simpler semantic structures in both languages. Third, bilingual participants' semantic understanding of central *shame* terms is also shaped by their language dominance and culture orientation. For those who are dominant in Chinese, it is more likely for them to consider it socially acceptable to express *shame* in public, and less likely for them to use *shame* words to refer to intense experiences. In contrast, the more English-dominant they are, the more likely it is for them to associate *shame* experiences with inferiority or worthlessness. Regardless of language dominance, the more individualist-oriented the bilingual participants are, the less likely it is for them to consider it socially appropriate to express *shame* in public, and the more likely for them to use *shame* words for intense experiences. The more collectivist-oriented they are, the more likely it is for them to use *shame* words for experiences that have an impact on others. Taken together, the present series of experiments represents an attempt to illustrate the impact of early bilingualism on the categorization of emotion.

CHAPTER 1

INTRODUCTION

1.1 Purpose of the Study

Cross-cultural communication is often hindered by cultural and linguistic differences. Such communication difficulties become more pronounced during the discussion of emotional topics because emotional experiences are interpreted and categorized in vastly different ways across cultures and languages (cf. Besemeres, 2004; Semin, Görts, Nandram & Semin-Goossens, 2002; Wierzbicka, 1986, 1999). This raises several questions, such as, if each language or culture provides individuals a particular lens for interpreting emotions, how then do bilinguals understand and categorize emotions? Do they interpret emotions differently when speaking different languages? Is their perception influenced by their language experience, and/or culture exposure? These are important questions to ask as more than 70% of the world's population is bilingual (Trask, 1999; Azadeh, 2011), and emotive communication is so essential in everyday life.

However, only a few studies have addressed these questions. Some previous studies find that bilinguals interpret emotions differently when speaking different languages (e.g., Koven, 2004; Panayiotou, 2004; Stepanova Sachs & Coley, 2006). For example, in Panayiotou's (2004) study, bilinguals were given the story of a successful young man 'Andy' from Greece who did his study overseas in the U.S., and later when he graduated he devoted much of his time to his work and ignored his widowed mother, friends and fiancée.

Hearing the story in English, bilingual participants tend to see Andy as a more acceptable figure given the American work ethic, whereas they see Andy as a less likeable person when hearing the story in Greek. Moreover, most participants exhibited sympathy to his widowed mother in the Greek scenario, which was absent in the American scenario. This seems to suggest that the bilingual participants displayed different social expectations and culturally appropriate emotional responses when hearing the same story in different languages.

Other studies show that emotion words in the first language (L1) are generally perceived as stronger in force than those in the later acquired language (e.g., Ayçiçegi & Harris, 2004; Dewaele, 2008; Harris, Aycicegi & Gleason, 2006). L1 tends to be the language of intimacy compared to L2 (second language), which always serves the function of showing distance or detachment (Bond & Lai, 1986; Grosjean, 1982; Gumperz, 1982; Koven, 2004). For instance, Bond and Lai (1986) find that it is easier for participants to discuss embarrassing topics in their L2, because they detach themselves from the higher rate of embarrassment and arousal they would have felt in their L1. Other studies also find that bilinguals undergo less uneasiness when swearing in their L2 (Degner, Doycheva &Wentura, 2012; Dewaele, 2004; Harris, Aycicegi & Gleason, 2003).

Generally these studies highlight the variations in how emotional experiences are encoded and interpreted across cultures and languages. However, very few studies examine how bilinguals cope with the cross-linguistic specificities in their emotive repertoire. Would their interpretation and categorization of emotions in one language be influenced by their

experience of living with another language/ culture? Or, in other words, could there be cross-linguistic transfer in the way bilinguals understand and express emotions? Thus far, existing studies provide no direct answer, as most studies are constrained to concrete words and abstract words. Some of these studies propose that for concrete words and abstract words, the cross-linguistic differences may be reduced due to cross-linguistic transfer (e.g., De Groot, 1992, 1993; Van Hell & De Groot, 1998). However, such a proposal remains to be tested for emotion words, since most recent studies argue that emotion words are different from both abstract and concrete words with distinct features of concreteness, imagiability and contextuality (cf., Altarriba, Bauer & Benvenuto, 1999; Altarriba and Bauer, 2004; Altarriba, Basnight-Brown, 2009). This will be discussed in detail in 2.1. Moreover, Wierzbicka (1986; 1999) argues that the ways emotions are encoded exhibit large cross-cultural/linguistic variations. It remains untested whether the greater variations of emotion words across cultures and languages make emotion words less susceptible to cross-linguistic transfer compared with concrete words and abstract words.

This dissertation aims to explore how early bilinguals[1] categorize emotions when presented with cross-linguistic differences in their two language systems. The category of *shame* is the focus of the present dissertation because it exhibits great cultural/linguistic variations between Chinese and English, in the following aspects:

(1) In terms of the prototypical expressions of *shame*, Chinese has been

[1] There has been disagreement in past research concerning the definition of early bilinguals regarding the acquisition onset age. For example, early bilinguals are defined as those who are exposed to both languages before 3 years (Paradis, 2010; see also McLaughlin, 1978). Others have established the onset age as before adolescence (Ng & Wigglesworth, 2007: 13), and no later than 6 to 12 years of age (e.g., Bialistok, Craik, & Ryan, 2006; Bialystok, Klein, Craik, & Viswanathan, 2004). In the current study, bilinguals born in Singapore and acquire born languages before age 6 were defined as early bilinguals.

found to have far more *shame* expressions than English (Shaver et al., 1992; Wang, 1994; Wang & Fischer, 1994; Li et al., 2004).

(2) With regard to the semantic structure of *shame*, Shaver et al. (1992), Wang (1994) and Li et al. (2004) show that in Chinese, *shame* emerges as a "basic emotion family" on the same level together with *happiness* and *sadness*. It also has a more elaborate semantic structure formed by various types of *shame* experiences. However, in English, *shame* only appears as a member under the family of *sadness* and does not seem to have an intricate structure formed by various layers of *shame* experiences.

(3) As for the typical features of *shame* experiences, Hwang (1987) and Quoss & Zhao (1995) argue that in Chinese culture, *shame* seems to be more of a moral value than just an emotion. Experiencing *shame* is understandable and sometimes anticipated because acknowledging *shame* is considered to help with self-improvement. However, other researchers argue that in cultures such as the U.S., *shame* is among the least pleasant emotions, as it is associated with weakness and inferiority (Bedford, 1994; Wong & Tsai, 2007; Tangney, 1998). Therefore, talking about *shame* is to be avoided.

As illustrated above, *shame* in Chinese and English differ in terms of (1) the number of prototypical expressions for describing or conveying *shame*; (2) the semantic structures formed by the typical *shame expressions*; and (3) the semantic properties of these central *shame* expressions.

The present dissertation aims to explore how these cross-linguistic differences in the categorization of *shame* influence bilinguals' knowledge of

shame category. The findings will shed light on whether bilinguals' knowledge of emotion categories is also susceptible to cross-linguistic influence, similar to what has been found for other domains, such as household objects (Ameel, Storms, Malt & Sloman, 2005; 2008; 2009). Moreover, unlike most existing studies that focus on the cross-linguistic influence among late bilinguals or immigrant bilinguals, the present dissertation examines early bilinguals. Late bilinguals acquire another language after the first language has already been established, while early bilinguals acquire both languages early and tend to use both languages simultaneously. Due to these critical differences, the patterns of cross-linguistic influence found for late bilinguals, such as stages of L1 transfer, L2 internalization, or L1 attrition, may not apply to early bilinguals (Jarvis & Pavlenko, 2008).

In the following section, some key terms central to the study will be discussed. First, the definition of emotion category knowledge is introduced, which then leads to the definition of the "*shame* category" in the context of the current dissertation. Next is a general discussion of the empirical studies on the effects of language and culture on cognition, followed by a further discussion on how such a cultural/linguistic effect is exhibited in bilinguals' categorization of the world.

1.2 Conceptual and Theoretical Background

1.2.1 Three Dimensions of the Emotion Category

In previous research, "category knowledge" was also called "concept knowledge" (e.g., Barrett, 2006; Malt, 1993; Murphy, 2002). The term "concept" will not be used in this dissertation, as it has been used in an inconsistent way by different researchers. For instance, Murphy (2002) uses

"concept" to refer to the knowledge base of worldly phenomenon that people use to classify things (e.g., concept of *animals*, or *furniture*) or events (e.g., *happiness*, or *sadness*) into categories. However, as Appel (2000) and Francis (1999) point out, in studies of language processing and representation, "concept" is used to refer to "meanings" of a word, similar to semantic meanings. Most psycholinguistic studies use "concept" and "semantics" interchangeably, while some researchers, such as Pavlenko (2005), make a distinction between the two: "semantics" refers to "word knowledge" (the indexical meaning of a particular lexical item) whereas "concept" refers to "world knowledge" that is obtained from real world experiences, through visual (imagery), audio (sound), perceptual (texture), and sensory cues. Therefore, to avoid confusion, "category knowledge" rather than "concept knowledge" is used in the current dissertation. Specifically, category knowledge is defined as follows:

There is general agreement among researchers that learning how to classify things/events into categories requires the following:

(a) knowing what are the central and marginal members of that class;

(b) knowing the internal structural relations between these group members

(c) knowing the distinct features that qualify a group of things/events as an identifiable class;

(Jarvis & Pavlenko, 2008; Keil, 1989; Malt, 1993; Murphy, 2002).

For example, when we talk about *furniture*, we would most conveniently think of common features or properties of *furniture*, which is to furnish homes, to support various human activities such as eating and sleeping, or to store things. These common features are what qualify an item as *furniture*.

We naturally think of typical items such as beds, tables, lamps, and chairs. In contrast, curtains, coat racks, or mattresses will not be as instantly recalled because they are not as prototypical. This is what we mean by some members are more central while others are relatively marginal. These members may form hierarchical relationships based on our chosen criterion for categorization. For example, fridges, microwave ovens, TVs, and DVD players are all electronic. On a more granular level, fridges and microwaves are electronic appliances, whereas TVs and DVD players are electronic entertainment gadgets. These are what we mean by internal membership structure.

Our knowledge of actions is also formed based on repeated exposure to the action. For example, our mental representation of what it means to *kick* is many exemplars of previous *kicks* we saw and there can even be more prototypical *kicks* and less prototypical *kicks* (like an outstep kick in soccer, or a flying karate kick). Similarly, our emotion knowledge is also formed based on repeated emotional experiences, which are organized around prototypes (Fehr and Russel, 1984: 1063; Rosch, 1978; Rosch & Mervis, 1975; Shaver, Schwartz, Kirson & O'Connor, 1987). For example, it is probable that an average person experiences or witnesses thousands of instances of *shame*. These *shame*-like events all share some prototypical episodic features based on our repeated experiences. The communication of *shame* is achieved based on our shared knowledge about the prototypical features of *shame*. When a person says s/he is undergoing *shame*, it is easily understood by both the listener and the speaker because the typical *shame* related features are similarly experienced by both to form categorized knowledge of *shame*: the physiological reactions in *shame*-like situations (e.g., blushing), the general feelings (e.g., feeling incompetent),

and the typical behavioral manifestations (e.g., chin down), etc..

To summarize, "category knowledge" refers to the generic knowledge of: (1) the central and peripheral *members*; (2) the internal membership structure; and (3) the properties shared by typical members. The next section discusses how language and culture shape people's understanding and categorization of the phenomenal world, including emotional experiences.

1.2.2 How Culture and Language Influence Thought

The relationship between language and cognition has been widely debated. The early proposal of Sapir and Whorf (Sapir, 1929; Whorf, 1956) on linguistic determinism has been controversial. Most researchers now tend to agree that language sensitizes its speakers to a particular way of identifying, differentiating, and categorizing things and events, without denying the existence of language-independent thinking (e.g., Bowerman & Choi, 2001; Choi & Bowerman, 1991; Spelke & Tsivkin, 2001; Sullivan, 1953). A considerable body of research provides empirical evidence that cognitive processes can exist before one acquires a language, but specific cognitive reorganization occurs and develops under the influence of language (Lucy, 1992; Lucy & Gaskin, 2001, 2003).

For example, Siok, Kay, Wang, Chan, Chen, Luke & Tan (2009) provide evidence that language (lexical category) interferes with categorical perception of *color*. They show that cortical regions contributing to language processes are activated during visual search tasks for color. Compared with colors from the same lexical category (e.g., a blue target and distractors of a different shade of blue, such as targets in *dark blue*, distractors in *light blue*), discrimination of colors from different linguistic categories (e.g., a *green* target

and *blue* distractors) provoked stronger and faster responses in the left hemisphere language regions.

Specifically, there is evidence for the transition from pre-linguistic perceptual categorization to linguistic categorization in various domains, such as *number* (e.g., Imai & Mazuka, 2003; Lucy & Gaskin, 2001; 2003), *color* (e.g., Davidoof, Davies & Roberson, 1999; Kay & Kempton, 1984; Lucy, 1997), and *space* (e.g., Bowerman & Choi, 2001; Choi & Bowerman, 1991).

For example, in the study of Lucy (1992), Yucatec-speaking children tend to match objects by *material*, whereas English speaking children tend to group objects by *shape*. Kay & Kempton's (1984) research on *color* also suggests that speakers of languages with no distinct terms for *blue* and *green* will judge *blue* and *green* as more similar than speakers of a language that distinguishes the two. In studies of Bowerman and Choi (1991; 2001), 18-month-old English-speaking infants were able to differentiate the movements encoded by *in* and *out*, while the Korean-speaking infants were able to differentiate between the movement of "tight fit" (e.g., put the ring on the fingers) and "loose fit" (e.g., put the apples in the bowl). Similarly, in a study of acquisition of numerical classifiers (a morphological category pervasive in Sinitic languages), Ng (1992) presented evidence to show that language-specific properties may determine children's sensitivity to classifiers. These studies support the fact that language directs speakers into language-specific ways of cognizing the world.

Language is therefore important for investigating the ways people perceive the world. Many researchers (e.g., Kövecses, 1990; Ogarkova, Borgeaud & Scherer, 2009) suggest that linguistic expressions can prove to be a

fruitful approach to the examination of emotional experiences as well.

In terms of culture, Ogarkova, Soriano & Lehr (2012) argue that language use is mediated by speakers' social status, gender, age, personality and cultural background, among which culture seems to be one of the most salient. Culture shapes and leads to specific manners of perceiving social events, formulation of culturally based categories, and ascribing lexicons with specific meanings germane to that particular cultural context, based on shared judgment, beliefs, and values of a particular community. Culture creates shared experiences and leads to unobstructed communication within the same cultural context, and meanwhile leads to the possibility of cross-cultural miscommunications. As Niedenthal, Krauth-Gruber & Ric (2006:313) puts it, "it is only when members of a culture are confronted by the cultural understandings of another culture that they realize their experiences are open to interpretation".

There are a number of ways that cultural beliefs can be grouped together. Among the many general classifications, many researchers (e.g., Mesquita, 2001; Matsumoto, Yoo, Fontaine, Anguas-Wong, Arriola & Ataca, 2008; Triandis, 1995, 2001) have pointed out that Individualism v.s. Collectivism (or the East v.s. West distinction) is essential to emotional events because emotions are social, and are based on interactions between self and others, so the perception of self in relation to others is a crucial factor in emotional experience.

Even though there are individual and inter-community differences in the degree of "individualist" or "collectivist" values, communities in China and the U.S. are often depicted as contrasting extremes in terms of values and culture type (e.g., Heine, 2001; Mascolo, Fischer & Li, 2003; Triandis, 1989). Chinese

culture is shown to be more collectivistic and is representative of Eastern culture, while American culture is more individualistic and representative for Western cultures. Therefore, these proposed cultural differences between Eastern and Western cultures, or "individualistic" and "collectivist" culture groups, would probably manifest themselves in studies comparing speakers from Mainland China and the U.S.

These distinctions are adopted in this current study with the understanding that the existence of "individualist" values does not equate to the absence of "collectivist" values. Individualist and collectivist values for organizing social life can coexist in different domains, and their boundaries may be fuzzy in actual practice (Green, Deschamps & Páez, 2005; Singelis, Triandis, Bhawuk & Gelfand, 1995). For instance, Markus & Kitayama (1991) and Matsumono, Weissman, Preston, Brown & Kupperbusch (1997) find that in the working domain, individuals are likely to be independent and competitive, whereas in the family domain, individuals are likely to be more caring about family members. Despite these individual variations, emphasis and prevalence for one of the two could still be found at a population level, and therefore some cultures may include individuals who for most situations orient to collectivism and in rare situations individualism, whereas the profile of another culture might be more oriented to individualism across different situations compared with collectivism (Singelis et al., 1995).

To summarize, although language and culture are vernacularly understood as two different things, in reality they are interconnected constructs that shape how people perceive the world, and the roles played by each are often times not easily separated. Both "culture" and "language" are

representations of "community of practice", which refers to a collection of people that share certain habits, customs, rituals, social norms, and values (Eckert, 2006). The term "culture" refers to a range of social and practical behaviors, which individuals in a community practice or engage in (Kitayama, 2002; Sperber, 1996). Individuals and groups within a community develop similar ways of views, values, and ways of talking. Therefore, "language" according to Eckert and McConnel-Ginet (1992) is also a type of behavior or practice within a community, as individuals and groups within that community encode their behaviors into sounds in a similar manner. As practices or behaviors of a community, language and culture are interactive and intertwined. As Kramsch (1998) and Risager (2006) suggest, language feeds back into culture in a reflexive relationship, shaping thoughts and practices, even as culture (the collection of practices of embedded communities) determines what is encoded in a language and how that encoding is expressed.

Though some aspects of language or culture can be delineated, albeit with reference to the other, a clear distinction between culture and language is extremely difficult to delineate, as both languages and cultures interdependently evolve over time according to the aggregated choices of individuals in their communities of practice. The key point relevant to the current dissertation is that culture and language are both terms for behaviors that act as windows into how speakers conceptualize the world around them. It is these conceptualizations that the current study of emotion terms is attempting to uncover. The precise relationship between language and culture is a complex question beyond the scope of this dissertation. Instead, this study will focus on the behaviors and impulses that emotionally charged terms may elicit from

monolingual and bilingual speakers and through that, form hypotheses about this relationship in the domain of emotion words.

1.2.3 Effects of Acquired Languages on a Bilingual's Cognition

As discussed in 1.2.2, language directs speakers to language-specific perceptions. What happens, then, for bilinguals who have access to two languages that differ in foci of perceiving the world? A number of linguistic (e.g., language proficiency, age of acquiring a language, and language exposure) and para-linguistic/social-cultural factors (e.g., acculturation) are suggested to have an influence on bilinguals' perception of the world.

Pavlenko (1997, 2003) finds that there is no specific item that is equivalent to "privacy" or "personal space" in Russian. In a story-retelling task, a woman sat down on an empty bench and started writing something down on her notebook. A man then came over and sat down on the bench, quite close to the woman. The woman closed her notebook and left. English speakers paid more attention to "privacy" than Russian speakers, as 17 out of 20 English speakers (85%) referred to the invasion of personal space or privacy, whereas Russian speakers did not observe such intrusion, nor did they comment on spatial invasion. However, "privacy" was mentioned in the retellings of Russian-English bilinguals who learnt English as a second language (settled in an English-speaking context), but not among Russian learners who learnt English as a foreign language (non-naturalistic setting). Bilinguals' performance reveals that the manner of acquiring a language influences the internalization of the concept of "privacy".

Similarly, Grabois (1999) illustrates that in word association tasks, L2 learners of Spanish (American students who lived in Spain for more than three

years), responded to primes in a similar fashion as their monolingual Spanish native speakers. For example, L2 users (not foreign language groups) listed *soledad* (solitude, aloneness, loneliness) as a response to *miedo* (fear), similar to Spanish monolinguals due to more time spent in Spanish culture. Foreign learners of Spanish (American students enrolled in Spanish courses in the U.S.) did not do so.

In another study, Malt & Sloman (2003) investigated the naming patterns among bilinguals with varied first languages other than English. They find that the more bilinguals were immersed in an English-speaking environment, the more English-like they became in naming and sorting household objects such as bowls, dishes, or containers. Similarly, in the study of Cook, Bassetti, Kasai, Sasaki & Takahashi (2006), Japanese-English bilinguals living in the United Kingdom for more than three years were more similar to English monolinguals in classifying/sorting objects in terms of *shape*. In contrast, bilinguals who had lived in the United Kingdom for less than a year displayed patterns similar to their Japanese monolingual counterparts as they still attended to *materials* due to the semantic classification of nouns in Japanese according to materials. These studies are interesting as the findings illustrate the dynamic nature of bilinguals' mental lexicon in response to changes of the environment.

Language proficiency is also found to influence bilinguals' categorization. For example, Athanasopoulos (2006) found that differences in the use of measure words lead to different perceptions about change of quantity. Specifically, English marks the number of countable nouns, but not uncountable mass substances such as *water*; Japanese, on the other hand,

applies classifiers to both cases (e.g., *futatsu no hon* 'two-classifier book', two books, and *nihai no mizu*, 'two-classifier water', two cups of water). Participants in the study were first given original pictures, and then pictures with changes in either the number or amount of substances. English monolinguals noticed changes in the number of countable objects (e.g., chickens) to be more significant than changes in the amount of substances (e.g., water). Japanese-English bilinguals with higher English proficiency behaved more like English monolinguals and identified pictures with changes in the quantity of substance (e.g., water) to be more similar to the original picture (e.g., water). In another study, Athanasopoulos (2009) reports that Greek differentiates a darker shade of blue called *ble* from a lighter shade of blue called *ghalazio*, whereas English does not. Therefore, Greek speakers not only register the contrast more acutely, but also subscribe more significance to such contrast when in communication. Results show that unlike Greek monolingual speakers, Greek-English bilinguals with higher English proficiency tend to blur the distinction between darker and lighter shade of blue. It appears that when addressing such cross-linguistic contrasts, bilinguals are likely to be influenced by the language that they are more proficient in.

Apart from culture/language exposure, and language proficiency, age of acquisition of a language is also found relevant to bilinguals' perception of the world. A case in point is Boroditsky's (2001) study. In describing time, English favors horizontal metaphors (e.g., *ahead of time*, *looking forward to*, *behind schedule*); Mandarin prefers vertical descriptions such as 上周 *shang4zhou1* 'up week', "last week"; 下周 *xia4zhou1*, (down week), "next week"; 上季度 *shang4ji4du4* (up quarter), "last quarter of the year"; 下季度 *xia4ji4du4* (down

quarter), "next quarter of the year". The study found that the later the participants learned English, the less likely it was for them to acquire sensitivity to horizontal stimuli as English monolinguals do.

A more recent study by Munnich and Landau (2010) examines the acquisition of L2 English prepositions among L1 Spanish speakers. As we have seen, languages vary in terms of which aspects of spatial relations must be obligatorily encoded. English prepositions are notoriously difficult for speakers of Romance languages like Spanish and French because many prepositions that are separate in English get collapsed into a single preposition in languages like Spanish or French (which has the preposition *à* which can be used for *in*, *on*, *at*, etc.). Munnich and Landau (2010) presented participants with photographs of spatial arrangements (e.g., a book *on* the table, a pencil *in* the box) and asked participants to either fill in the blanks with the right prepositions or to judge the appropriateness between two target prepositions in fitting the pictured relationship. They found that age of acquiring English was a significant predictor for whether or not participants supplied the correct English preposition in their response, suggesting that early age of acquisition of a second language contributes to success in integrating the spatial concepts encoded in that language.

In general, these studies suggest that when bilinguals have access to different language systems–each of which has language-specific ways of encoding and conceptualizing the world–how they perceive the world is influenced by their language learning histories and cultural exposure. As Pavlenko (2014:302) argues, bilingualism may "destabilize" (i.e., "deconstructure" and "restructure") bilinguals' categorization of the world, and

therefore bilinguals' categorization is a dynamic process that is constantly changing with bilinguals' experiences.

Having discussed how bilinguals' cognition is shaped by their language histories and life experiences, the following section focuses on Singapore's history of language policies and their impact on bilinguals' language repertoire, which lays out an overall language profile for the target bilingual group of this study.

1.2.4 Language Repertoire of Bilinguals in Singapore

Bilingualism has been a defining feature of Singapore's multi-ethnic society. The "English + 1" bilingualism policy (English plus the mother tongue/ethnic language—Malay, Mandarin or Tamil) has been advocated since the independence of Singapore in 1965 (Tan, 2006). A large proportion of bilinguals in Singapore are Chinese-English bilinguals, as the Chinese ethnic group accounts for 74.1% of the total population according to the latest official surveys (Singapore Department of Statistics, 2010).

Although the medium of instruction and the working language is English, Mandarin Chinese and English are both used in every part of life. For example, it is common to hear people talk in both languages, and very often a mixture of both, in trains, food courts, restaurants, schools, and even at workplace. Additionally, TV programs, radio channels, and newspapers also have coverage in both languages.

Singapore is a multi-ethnic society with diverse cultures and languages. Different ethnic groups mingle and influence each other in various ways including languages, as evidenced by the unique mish-mash use of Malay, Tamil, and different varieties of Chinese, together with English vocabulary,

resulting in a variety called colloquial Singapore English (CSE), or 'Singlish'.

In the first decade of the twentieth century, Singlish arose as a variety originally spoken by working-class people without English education, who were forced to cope with English and learned English without formal schooling (e.g., Lim & Wee, 2001; Vaish, 2006). Bazzar Malay, Malay, Hokkien, and other dialects have all left their linguistic marks on CSE (e.g., Low & Brown, 2005). According to Chua (2011) and Leimgruber (2011), CSE is acquired natively among Singaporeans as a marker of identity, particularly in informal settings, including inter-ethnic exchanges. Standard Singapore English (SSE) on the other hand, is used in official settings such as schools, classes, workplaces, or written documents. In summary, most Chinese Singaporeans' language repertoire is expanded beyond the two standard varieties of English and Chinese due to the common use of CSE. Therefore, to explore how Singaporean bilinguals understand *shame*, the language repertoire in this community including CSE cannot be ignored.

1.3 Overview of the Dissertation

In Chapter 2, "emotion words" and "*shame* words" are defined. Following this is a review of the general findings on how linguistic/cultural specificities of emotion words reflect different ways of interpreting emotion related events. Next, a more focused discussion is provided on how *shame* is differently encoded and interpreted in Chinese and English with regard to (a) the available *shame* expressions; (b) the semantic structure formed by *shame* expressions; and (c) the features of typical *shame* experiences. Research questions are raised as to how these cross-linguistic differences of *shame* category manifest themselves among Chinese and English bilinguals.

Methodological concerns of these studies are also discussed. In view of the open questions left by the extant literature, Chapter 3 introduces the methods proposed for the current study.

Chapters 4 through 6 present the details of three studies, each examining a dimension of bilinguals' category knowledge of *shame*. Chapter 4 examines the first dimension ─ the prototypical *shame* members (expressions). Chapter 5 explores the second dimension ─ the semantic structures of *shame* members. Chapter 6 examines the third dimension by looking more closely at the semantic properties of typical *shame* expressions. Chapter 7 covers the implications of the general findings, limitations and future directions.

CHAPTER 2

LITERATURE REVIEW

In this chapter, previous definitions of "emotion words" are first reviewed. Based on this review, "*shame* words" are defined in the context of the current study. The specific linguistic/cultural features of emotion words are also discussed, followed by a more focused review on how *shame* is differently encoded in Chinese and English. Research questions are raised as to how these cross-linguistic/cross-cultural differences manifest themselves among Chinese and English bilinguals, and how bilinguals' *shame* category knowledge is influenced by their language histories, as well as their cultural orientations.

2.1 Definition of Emotion Words

Emotion words have previously been classified as "abstract words" and have only recently received direct research attention separately from abstract words. Previous research fails to reach a consensus on what count as emotion words. Clore, Ortony & Foss. (1987) propose defining "emotion words" as adjectives or nouns that could fit in the sentence frame "he has a feeling of *X*" (e.g., he has a feeling of *disappointment*), and "he feels *X*" (e.g., he feels *disappointed*), or "feeling *X*" (e.g., feeling *sad*) and "being *X*" (e.g., being *sad*). However, as Pavlenko (2008b) points out, these guidelines are problematic because nouns and adjectives are given too much priority, which makes it difficult to apply to languages such as Russian, Chinese or Polish where verbs or other constructions might be prevalent for expressing emotions. For example, in Mandarin Chinese, the syntactic structure of 我很高兴 *wo3 hen3 gao1xing4*

"I am very happy" and 我很伤心 *wo3 hen3 shang1xin1* "I am very sad" is "someone + very + verb". Verbs such as 高兴 *gao1xing4* and 伤心 *shang1xin1* are often treated as "stative verbs", even though they are more or less similar to adjectives. Crucially, from a semantic rather than a syntactic perspective, both are describing *properties* (*states*) rather than *events* (*actions*). As can be seen, the syntactic templates of Clore et al. (1987) do not fit every language.

In view of this problem, Pavlenko (2008a) proposed a semantic definition of emotion words that avoids such language bias. She argues that emotion words can be grouped into three subcategories:

(1) Words that directly refer to a particular emotion state (e.g., *happy, angry*) or process (e.g., *to worry, to rage*);

(2) Words that describe behaviors, or expressions of particular emotions without naming the emotions (e.g., *to scream, to cry*);

(3) Words that project a speaker's attitude and may elicit emotions from interlocutors (e.g., taboo and swear words, endearments, or interjections, etc.).

Pavlenko's (2008a) definition is adopted for the present study and "*shame* words" are proposed to include: (1) words that clearly refer to states of feeling *shame* (e.g., *ashamed, disgraced*); (2) words that describe accompanying bodily features, facial expressions or action tendencies (e.g., *hide, blush*) in *shame* situations; (3) and words that express speakers' attitudes towards shameful acts of others (e.g., *asshole*, *shame on you*) or words that elicit *shame related emotions* from interlocutors (e.g., *scandal, ridicule*).

The following addresses the distinct features of emotion words as compared with concrete words (*color* terms, *object* terms) and abstract terms

(e.g., *science*), which have been more extensively studied in previous research on bilingualism. These crucial differences might make the past findings on concrete and abstract terms not applicable to emotion words.

Altarriba and colleagues (Altarriba et al., 1999; Altarriba & Basnight-Brown, 2009; Altarriba & Bauer, 2004) find that emotion words differ from abstract and concrete words in terms of concreteness, imageability and context availability. According to Paivio, Yuille & Madigan (1968:17-18), "concreteness" is defined as the directness of referring to an actual entity or thing. "Imageability" refers to the word's capacity to arouse images, and "context availability" is defined as the ease of thinking of a context for the word. Compared to abstract words (e.g., *science*), emotion words (e.g., *embarrassed*, *sad*) are found to be more contextually available and easier to be associate with an image, but less likely to be associated with concrete entities. On the other hand, compared with concrete words (e.g., *dog*, *kitchen*, and *teacher*), emotion words are found to be less imageable, less easily to specify a context, and less concrete (See Table 1).

Table 1 *Three Distinct Word Types*

Word type	**Word example**	**Context availability ranking**	**Imageability ranking**	**Concreteness ranking**
Concrete words	*teacher, dog*	1	1	1
Abstract words	*science, culture*	3	3	2
Emotion words	*embarrassed, sad*	2	2	3

Beside these three features, emotion words are shown to be more memorable and more readily recalled than "neutral" words (Altarriba & Bauer, 2004; Annoshian & Hertel, 1994; Talmi & Moscovitch, 2004; Rubin & Friendly, 1986).

It is conceivable that differences in concreteness, imageability, context availability, and memorability are likely to cause emotion words to be represented differently from concrete and abstract words in bilinguals' mind. Consequently, previous bilingual models that center on concrete words and abstract words may not apply to emotion words.

The following section further discusses the cultural/linguistic variations of emotions, which again is central to the topic of bilinguals' category knowledge of emotions. The discussion is then narrowed down to how *shame* is differently encoded and understood in Chinese and English with regard to each dimension: (a) typical *shame* members (expressions), (b) semantic structures; and (c) semantic properties of typical *shame* experiences, all of which lead to the question of how these cultural/linguistic specificities manifest themselves among Chinese and English bilinguals.

2.2 Emotions across Languages & Cultures

Both similarities and differences are found for how emotions are encoded across languages. Some basic emotions such as *fear*, *anger*, *sadness* and *happiness* are identified in various languages such as English, Italian (Church, Katigbak & Jensen, 1998) and Chinese, Indonesian, and Filipino (Shaver et al., 1987; 1992). Similar broad dimensions — *valence* (pleasant-unpleasant) and *arousal* (intense-calm) have also been shown to underlie the semantic structures of emotion words in various languages such as Filipino,

English, Japanese and Chinese (Church et al., 1998; Moore, Romney, Hsia & Rusch, 1999).

Language-specific means of encoding emotions are also documented in past literature. Labels for certain emotional categories are absent in some languages for culture-specific reasons. For example, Levy (1973) points out that Tahitians do not have a specific word for *sadness* or *depression*. For situations that would call for *sadness* or *depression*, people would resort to expressions that denote a troubled bodily state such as "feeling fatigued", or "feeling sick". Levy explains that feelings such as *sadness* or *depression* for the loss of companionship in Tahitian culture are relatively "hypocognized": feelings of loss of companionship were played down. When being separated from a close friend or loved ones, Tahitians would express it as feelings of physical illness. Wierzbicka (1986) also suggests that English does not have a word for the feeling encoded by the word "*tcsknic*" (literally means "sadness") in Polish. "*Tcsknic*" is associated with *sadness* caused by separation, which can be traced back to the days during the partition of Poland at the end of 18th century. Words with the same connotations as "*tcsknic*" do not exist in English.

Two apparently equivalent words may acquire different connotations in two languages. For example, in English *shameless* can be used to comment on not only serious and damaging misconducts, but also in a joking way for less serious wrongdoings. However, the near-equivalent Mandarin term 无耻 *wu2chi3* is only used for serious misconduct.[2]

[2] This is based on a personal experience. Once a female Chinese-speaking friend got offended by her bilingual friend's use of 无耻 *wu2chi3* "shameless" when she said that she is single because she is way out of the league of most boys.

Language-specific ways of encoding and categorizing emotional experiences are also evident in grammar as well as in lexicon. A case in point is the difference of dominant grammatical categories for the emotional lexicon across languages (Pavlenko 2002, 2008b; Pavlenko & Driagina, 2007; and Semin at al., 2002). Wierzbicka (1992) and Pavlenko & Driagina (2007) find that the emotional lexicon of Russian and English both have nouns (e.g., *radost/joy*), adjectives (e.g., *rasstroenny/upset*), adverbs (e.g., *grustno/sadly*), and verbs (e.g., *rasstroit_kogo-to/to upset someone*), but Russian has more intransitive verbs than English. This could be explained by Semin et al.'s (2002) claim that in cultures that value relationships and interdependence, emotion terms function more as "relationship-markers" and are realized predominantly by verbs (e.g., *radovat'sial*/*to rejoice* in Russian). In cultures that value individuality, emotion terms function predominantly as "self-markers" (with a focus only on the agent) and are more frequently represented by adjectives or nouns, such as in English (*A is aggressive,* or *I am happy*).

Distinct culture-specific perceptions of emotions are reflected in emotion-related metaphors, as well as in the lexicon and the grammar. Somatization of emotions is seen in many languages (Kövecses, 1990; 2003), and Chinese, in particular has been repeatedly discussed in past literature. Multiple studies (i.e., Brain, 1989; Ye, 2002; Yu, 2002) demonstrate that Chinese emotion expressions heavily draw on body organs, because according to Chinese medicine philosophy, some organs are believed to be affected by the experience of a particular emotion. For instance, Brain (1989) finds that in Chinese, somatic features are prevalent in expressions of various emotions: 心神不安 *xin1shen2bu4an1* (literal meaning: heart spirit is not peaceful), "to be

anxious"; 心惊肉跳 *xin1jing1rou4tiao4* (literal meaning: heart fears and flesh jumps), "afraid, to have the jitters"; 肺都气炸了 *fei4dou1qi4zha4le1* (literal meaning: one's lungs explode because of anger), "furious".

In summary, while there are certain universal parameters, various studies provide evidence that emotions are labeled and perceived differently by speakers of different language/culture backgrounds. Different languages choose to highlight or downgrade certain emotions. Seemingly equivalent emotion words are also associated with culture-specific meanings.

The next section provides a more focused discussion of how *shame* is encoded and conceptualized differently in Chinese and English from each of the three dimensions of *shame* category－the typical s*hame* members (expressions), the semantic relations between these *shame* members, and the semantic properties of *shame* members.

2.3 Understanding *Shame* in Chinese and English

2.3.1 Prototypical *Shame* Expressions in Chinese and English

Previous studies suggest that the ways *shame* is verbalized in Chinese and English are quite different. These studies originated from the pioneering works of Shaver et al. (1992) and Wang (1994). Their studies show that Chinese has around 150 expressions for *shame*, *guilt* and *embarrassment*, compared with only a few *shame* expressions in English. Later research also supports the claim that Chinese expressions make distinctions between various kinds of *shame* experiences that do not have distinct expressions in the English lexicon (Bedford, 2002; Li et al., 2004; Shaver, Murdaya & Fraley, 2001). For example, in Chinese, 没有脸 *mei2 you2lian3* means "having no face [for lack of integrity or moral values]", whereas 没面子 *mei2mian4zi3* means "having no

face [for lack of honor, status, power or success, or feeling dishonored]".

Their studies provide invaluable insights into the understanding of *shame* across cultures. However, several aspects of these studies' methodology raise questions about the results. In these two studies, words that researchers considered relevant to *shame* were taken as the starting point, such as 耻 *chi3* "shame", 羞 *xiu1* "shy", 辱 *ru3* "humiliation", 惭 *can2*, "sense of *shame* for wrongdoing", 愧 *kui4* "guilt" and 脸/面/颜 *lian3/mian4/yan2* "face". Starting from these words, the authors selected other related words from the dictionary in a "snowballing" manner. For example, the word 愧 *kui4* "guilt" led to 疚 *jiu4* "guilt", and then researchers started to search for words that are related to 疚 *jiu4* "guilt". Finally they came up with a list of *shame* expressions. Then ten native speakers were asked to add other *shame* expressions to the list. At last, 20 participants were involved to rate the *shame* terms on the degree of relatedness to *shame*, using a scale of "1" (being weakest) to "7" (being strongest).

Such a method poses a problem because the words collected may be biased by researchers' presumption of *shame* expressions. Even though native speakers were involved at a later stage in judging the degree of *shame-relatedness*, the chance for native speakers to come up with *shame* words was rather limited in the first place. Besides, the cut-off score for *shame*-relatedness was 2.6 out of a 7-point scale, which was relatively low. Consequently, not all *shame* words retained in the list are strongly associated with *shame*.

Furthermore, such a "snowballing" method of starting from one word such as 羞 *xiu1* "shyness", and then including its related expressions such as 羞

红了脸 *xiu1hong2le1lian3* “face turns red for shyness” and 满脸羞色 *man3lian3xiu1se4* “face filled with an expression of shyness” is problematic since Chinese morphology lends itself to extensive compounding terms. 羞红了脸 *xiu1hong2le1lian3* and 满脸羞色 *man3lian3xiu1se4* are just morphosyntactically built off of each other. Likewise, there are both 羞死人 *xiu1si3ren2* “ashamed to death”, and 羞死八辈子先人 *xiu1si3ba1bei4xian1ren2* “so ashamed that the ancestors of eight generations even want to die again”; these are not really different expressions, but rather the same expression (e.g., 羞 *xiu1* “shyness”) with different intensifiers attached.

Thirdly, Chinese speakers involved in the study were living in North America for 1 to 6 years while the study was being carried out. Their recent experiences in the U.S. may have modified their notions of *shame*, as the author (Wang, 1994:50) acknowledges. Therefore, even if they might have included all the available *shame* expressions, not all of them are necessarily typical. In order to test this, interviews with five Chinese native speakers from Mainland China were conducted in the present study. Some idiomatic expressions in their list were identified as not strongly related to *shame* such as in 打狗看主人 *da3gou3kan4zhu3ren2* (literal meaning: be clear who is its master before you beat a dog), “even the lowliest creature you embarrass may be related to someone you do not want to embarrass”; 不看僧面看佛面 *bu2kan4seng1mian4kan4fo2mian4* (literal meaning: if you show no respect to the monk, you should at least show respect to the Buddha), “one should respect the face of a highly respected person even if not his/her associates”; Some expressions are from Chinese dialects such as 方人 *fang1ren2* “embarrassing

someone" from the Sichuan dialect, or 掉底子 *diao4di3zi1* "lost face totally" from the Hubei dialect. Others are rarely heard or used, such as 不要皮 *bu2yao4pi2* (literal meaning: does not want one's skin), "shameless"; 愧悔 *kui4hui3* "guilt-regret"; or 羞恶 *xiu1wu4* "*shame* to loathing/aversion". Additionally, the reference dictionary (*The Modern Chinese Dictionary*, 1978) was published in the seventies. As a result, a more recent word list was needed.

These limitations could constrain the generalizability of their findings and therefore, an attempt is made in the current dissertation to collect prototypical *shame* expressions from Chinese and English monolingual speakers before we assume that Chinese and English differ regarding the number of available *shame* expressions in their two languages, and that Chinese and English bilinguals would face such cross-linguistic differences.

2.3.2 Semantic Structure of the *Shame* Category in Chinese and English

Shaver et al. (1992, 2001) and Wang & Fischer (1994) further point out that in Chinese, shame together with guilt, remorse and regret form an emotion family, in parallel with other basic emotion families such as happiness or sadness (See Figure 1). However, these emotions such as shame and guilt are assigned as members under the family of sadness in English.