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Published In

Marc Fetscherin, Adamantios Diamantopoulos, Allan Chan, Rachael Abbott, (2015) "How are brand names of Chinese companies perceived by Americans?", *Journal of Product & Brand Management*, Vol. 24 Iss: 2, pp.110 - 123.

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How are Brand Names of Chinese Companies perceived by Americans?

Abstract

Purpose: Drawing from prior research in psychology, linguistics and marketing, we conduct an experimental study of Americans' preferences for the English version of Chinese brand names. Specifically, we assess the impact of string length and semantic relevance to English on meaningfulness, memorability and likeability of brand names from Chinese companies.

Design/methodology/approach: A 2x2 experimental design is used whereby brand names are categorized by string length (short vs. long) and semantic relevance to English (with vs. without). Respondents' perception of the Chinese language in terms of pronounceability, language familiarity and language attitude are used as covariates.

Findings: Our results reveal that shorter brand names and those with semantic relevance to English are perceived as more memorable. We also find that pronounceability of the brand name does influence brand name preference in terms of their meaningfulness, memorability and likeability.

Research limitations/implications: Our exploratory study is limited to Americans' perceptions of the English version of Chinese automobile brand names.

Practical implications: Chinese companies should consider carefully the brand name characteristics in terms of string length, semantic relevance as well as their ease of pronunciation when choosing and introducing their brands in the United States.

Originality/value: This is the first study which assesses Western consumers' perception of brand names from Chinese automobile companies in terms of their brand meaningfulness, brand memorability and brand likeability.

Keywords: Branding, Brand Naming, China, Chinese Brands, Westernization

How are Brand Names of Chinese Companies perceived by Americans?

1. Introduction

The number of brands introduced every year has increased significantly. According to the World Intellectual Property Organization (WIPO, 2011), there were over 3.15 million worldwide trademark registrations (aka brand names) in 2010, of which 42% were registered in China. The purpose of a brand name – whether corporate-dominant, product-dominant, or mixed– is to differentiate the brand from competitors’ (Douglas et al. 2001). Brand names have been “found to have a significant impact on consumers’ attitudes” (Häubl, 1996, p. 90) as well as “influence consumers’ evaluation of and purchase intentions towards a product” (Ahmed *et al.*, 2004, p. 102). An ineffective brand name can severely hinder a product’s success (Bao *et al.*, 2008)¹ while an effective one can enhance brand awareness and create a positive brand image (Aaker and Joachimsthaler, 1999; Klink, 2000) thus resulting in consumers’ positive perceptions and preference (Salciuviene *et al.*, 2010). In short, to succeed in international markets, it is critical and challenging for companies to create effective brand names across languages and countries (Athaide and Klink, 2012; Shrum *et al.*, 2012).

Previous research shows that effective brand names have to be meaningful (Schmitt *et al.*, 1994; Kohli *et al.*, 2005), memorable (Zhang and Schmitt, 2001; Schmitt *et al.*, 1994; Lencastre and Beirao, 2004) and likable (Allen and Janiszewski, 1989). *Meaningfulness* of a brand name relates to the ability of a word to evoke imagery (Lowrey *et al.*, 2003). *Memorability* in turn relates to how easily it is recognized and recalled (Samu and Krishnan, 2010) and *likeability*, how appealing the brand name is to consumers (Keller *et al.*, 1998). In principle, these attributes should apply to all brand names, whether they are indigenous brand names or imported brand names, Chinese or Western.

Despite the importance and emerging of Chinese brand names internationally, to the authors’ best knowledge, there is only a single published study (Kum *et al.*, 2011) which investigates international brand naming strategies of Chinese companies. However, that study focuses on the

¹ For several examples of the adverse impacts of poorly chosen brand names, see Haig (2005).

process of how to *translate* the brand name from Chinese to English but does not look at consumers' perceptions of these brand names. Although translating a brand name is an important step in the branding strategy, it is ultimately the consumers' perception which matters. This paper closes this gap by investigating consumer's perception of translated or 'Westernized' version of brand names originating from China; we thus focus on how are 'Westernized' Chinese brand names perceived. Specifically, in order to advance our knowledge and understanding of international brand naming, we complement Kum, Lee and Qui's (2011) study by testing consumers' preference of the English ('Westernized') version of brand names of Chinese companies². As the next section shows, we focus on two key linguistic characteristics of brand names which influence consumers' brand name preferences in terms of their meaningfulness, memorability and likeability. The first is *string length*, that is, the length of the brand name as measured by the number of letters (Gontijo *et al.*, 2002; Vanden Bergh *et al.*, 1987). The second is *semantic relevance* to English which is achieved by placing morphemes, parts or entire words in the brand name which are familiar or sound English (Keller *et al.*, 1998; Klink, 2001; Bao *et al.*, 2008).

Against this background, our study makes the following contributions to extant international branding theory³. First, very little is known about Chinese brand name preference by Western consumers, despite the fact that Chinese companies are internationalizing rapidly. By complementing the study by Kum, Lee and Qui's (2011), our research provides a valuable contribution to brand naming theory. Second, we empirically show how linguistic characteristics such as string length and semantic relevance to English affect meaningfulness, memorability and likeability of Chinese brand names. Third, we assess how respondents' perception of the Chinese language affects Chinese brand name preferences. Finally, from a managerial point of view, our study addresses a very timely and relevant topic since Chinese companies are going global and need to appropriately choose their 'Westernized' brand names in order to enhance brand

² By a 'Chinese brand names' we mean brand names of Chinese companies and not brand names in the Chinese language.

³ See Whitelock and Fastoso (2007, p. 266) for a definition of international branding. "International branding is a field within international marketing concerned with the challenges that companies face when their brands cross national borders. These challenges relate to the essence of the brand in terms of *brand name*, brand visual (e.g. logo, colors) and sound elements (e.g. jingles, music), and brand personality"

recognition and recall and, ultimately, improve their brand image in international markets.

2. Conceptual Background

The way in which companies can create effective brand names is a major topic in marketing literature (Aaker and Joachimsthaler, 1999; Keller and Lehmann, 2006). In this context, the linguistic components of a brand name are important in the consideration of brand name transferability (Kum *et al.*, 2011), standardization or adaptation of a brand name (Alashban *et al.*, 2002; Gillespie *et al.*, 2002; Hsieh, 2002; Wong and Merrilees, 2007) and brand perception and brand preference (Lee and Ang, 2003; Chan and Huang, 1997; Song and Schwarz, 2009; Chan *et al.*, 2011; Kum *et al.*, 2011). Consumers learn about new brands and remember them through brand recognition and recall for which meaningfulness, memorability and likeability play a key role (Myers-Levy, 1989; Keller, 1993; Keller *et al.*, 1998; Lerman and Garbarino, 2002). This is also context-bound and contingent on use in situated activities (Wittgenstein, 1953).

Past brand naming studies mostly assessed Western brand names by Western consumers (Kanungo, 1968; Vanden Bergh *et al.*, 1984; Schmitt *et al.*, 1994; Keller and Lehmann, 2006; Samu and Krishnan, 2010). A few studies investigated Western brands by non-Western consumers such as Asian (Chan, 1990; Hong *et al.*, 2002), Indian (Kinra, 2006) or Chinese consumers (Zhang and Schmitt, 2004; Francis *et al.*, 2002; Schmitt and Zhang, 2012; Villar *et al.*, 2012). However, despite the significant increase of brand name registration in Asia, specifically in China, hardly any study has examined non-Western brands (i.e., brands from China) as perceived by Western consumers. This is quite surprising in light of the latter's increased global presence as the examples of Chinese brand names like *Haier*, *Huawei*, *Lenovo* or *Tsingtao* show (Gao *et al.*, 2003).

Figure 1 provides a summary of the previously discussed brand naming studies. These can be grouped by the origin of the brand (Western vs. non-Western) and the origin of consumer (Western vs. non-Western). One can see that the majority of studies focus on Western brands targeted to Western consumers (Kanungo, 1968) or non-Western consumers (Chan, 1990). In contrast, our paper, like that of Kum, Lee and Qui (2011), focuses on non-Western (Chinese) brands to Western (American) consumers.

Insert Figure 1 about here

Meaningfulness. Empirical studies show that brand names with *descriptive* meaning (e.g., Pizzahut) or *suggestiveness* meaning (e.g., GoPro) in terms of attributes or benefits offered are more favorably seen by consumers (Kohli *et al.*, 2005; Keller *et al.*, 1998). Descriptive meaning is mainly related to brand awareness while suggestiveness is mainly related to brand image. Kanungo (1968) found that brand names having higher meaningfulness are better retained in memory than those having low meaningfulness. Robertson (1987) examined this across different product categories and showed that high-imagery brand names have higher brand recall and recognition scores than low-imagery brand names. Hinton, Nichols, and Ohala (1994), Yorkston and Menon (2004), and later Shrum and Lowrey (2007) assessed sound symbolism and showed that the sound of a word or brand name conveys meaning. Indeed, phonetic attributes of brand names can connote product features (Baxter and Lowrey, 2011) and using sound symbolism in brand naming can help enter international markets (Athaide and Klink, 2012). Sound symbolism has been identified as particularly important for unfamiliar brand names (Klink, 2000; Yorkston and Menon, 2004) which is the case for most Chinese brand names in Western markets like the USA.

Memorability. This refers to consumers' ability to recognize and recall the brand name (Samu and Krishnan, 2010). Psycholinguistic research shows that "brand names themselves might also contribute to their memorability" (Lowrey *et al.*, 2003, p. 7). Schmitt, Pan and Tavassoli (1994) examined language differences between Chinese and English and their effect on mental representations and consumer memory. They found that Chinese-speaking participants were more able to recall brand names when they were asked to write them down than when they were asked to generate a spoken response; for English-speaking participants the reverse pattern was observed. These results support the theory that consumer memory for verbal brand information is a function of native language and familiarity with brand names (Schmitt *et al.*, 1994). In other words, if a brand name sounds related to the native language or is familiar, it is more likely to be memorable.

Likeability. Likeability refers to the verbal or aesthetical appeal of the brand name (Keller *et al.*, 1998) whereby consumer attitudes are shaped by secondary associations developed through the brand name (Allen and Janiszewski, 1989). As the country of origin (COO) literature shows, “using brand names that evoke foreign associations through, for example spelling a brand name in a foreign language [...] suggesting a specific COO in the hope that it will evoke certain product qualities or a positive association making the brand name more likable” (Melnik *et al.*, 2012, p. 21). For example, using French brand names for products originating from other countries may help evoke hedonic characteristics of the products (Salciuviene *et al.*, 2010). Such brand origin confusion influences consumer attitude and preferences (Häubl, 1996; Zhuang *et al.*, 2008) and might be beneficial for Chinese brand names internationally. Related to this, COO research indicates that “products originating from less developed countries are subject to a greater country of origin effect, and are evaluated less favorably than products originating from more developed countries” (Fetscherin and Toncar, 2010, p. 167). In addition, “consumers evaluate products on the basis of intrinsic (e.g. taste, style, performance and quality) and extrinsic (e.g. brand name) information cues” (Chattalas *et al.*, 2007, p. 65). Consumers “use extrinsic cues when intrinsic cues are missing [...] or] when consumers are unfamiliar with the product” (Ahmed *et al.*, 2004, p. 282). In those instances, consumers “rely on cues from other sources to determine brand origin such as perceived language of the brand name, [...] or] features such as the spelling or pronunciation of the brand name” (Magnusson *et al.*, 2011, p. 458). For example, consumers “may be drawn to Häagen-Dazs thanks to its Scandinavian-sounding brand name, but Häagen-Dazs is an American brand employing a foreign branding strategy. The Chinese Haier brand switched from Qingdao Refrigerator Company to its current German-sounding brand name in 1992. Similarly, Seagull, Jasonwood, Eastcom, Bird, and Draft are all examples of other Chinese brands that have adopted a foreign branding strategy” (Magnusson *et al.*, 2011, p. 458). These examples show the importance of choosing a brand name which fits and is congruent with the target market in terms of linguistic characteristics (Essoussi and Merunka, 2007).

3. Research Hypotheses

3.1. Brand Name Transferability

From English → to Chinese

Zhang and Schmitt (2001) explored the specific methods employed when translating an English brand name to Chinese. Similar to Czinkota and Ronkainen (1990), the authors identified three approaches for transferring brand names: (1) phonetic transfer (by sound), (2) semantic transfer (by meaning) and (3) phonosemantic (both sound and meaning). The most sophisticated method of brand name transferability makes use of the third method by finding a brand name which transfers both, sound and meaning of the brand name.

From Chinese → to English

There are fundamental language differences between Chinese and English in terms of writing system, grammar, phonetics and “these differences influence consumer memory of verbal information and consumer information processing” (Hernandez and Minor, 2010, p. 582). Chinese is a *pictorial-based* or *logographic* language where the same ‘character’ can have different meanings depending on the tone and pronunciation used (Hernandez and Minor, 2010). English, in contrast, is a *phonetic-based* or *alphabetic* language where meaning and pronunciation are not affected by the tone.

In the case of translating from Chinese to English, Kum, Lee and Qui (2011) discuss in great detail the translational challenges and show there are four different methods to translate a Chinese brand name into English. In addition to the three traditional translation methods of phonetic, semantic and phonosemantic suggested by Czinkota and Ronkainen (1990) and Zhang and Schmitt (2001), the authors added Hanyu Pinyin conversion. This method is unique to translation of a logographic language (Chinese) to alphabetical language (English). Pinyin has been the official system for Romanizing Mandarin in China since 1958 (Kum *et al.*, 2011). This Romanized phonetic system provides an alternative to the translation or transliteration methods. Two approaches of Hanyu Pinyin exist. One approach includes only the Pinyin version of the Chinese brand name while the other approach includes both the Pinyin and character version of the Chinese brand name.

Depending on the method used, the string length and the meaning of the brand name in English may be affected. In this respect, Chinese companies have some flexibility to select the linguistic characteristics of their English version of their brand name in terms of number of characters used (i.e., string length) and type of characters, morphemes or part of words (i.e., semantic relevance). We are suggesting here that these English counterparts of the Chinese brand names are not translation in the strict sense. We label these as the English (Westernized) version of the Chinese brand names. They can be phonetic by sound (such as 樂百氏 ‘translated’ into *Robust*), semantic by meaning (such as 白貓 ‘translated’ into *White Cat*, 華陽 ‘translated’ into *China Sun*), phonosemantic by sound and meaning (such as 中國民生銀行 ‘translated’ into *China Minshen Bank*, 西單商場 ‘translated’ into *Xidan Shopping Mall*), and Hanyu Pinyin by Romanized Chinese phonetic rules (such as 海爾 ‘translated’ into *Haier*, 蘇寧 ‘translated’ into *Suning*, 老鳳祥 ‘translated’ into *Laofengxiang*).

Regarding the effectiveness of Hanyu Pinyin translation of brand names, Kum, Lee and Qiu (2011) found that the preference for this method varies according to the consumer’s level of familiarity with the Chinese language. Through globalization and the internationalization and integration of Chinese companies in the global economy, there is a growing interest in learning Chinese as a second language. Therefore, understanding the preference for Pinyin translation of Chinese brand name is becoming increasingly important for Chinese companies. We will test the ease of pronounceability, level of familiarity and language attitude for Chinese as control variables in this paper.

3.2. String Length

Information processing theory suggests stimuli that are easier to process are more memorable (Schwarz, 2004; Duke, 1995). Research in psychology clearly shows “the word-length effect rely on a time-based decay process within the articulatory loop structure in working memory [...]. People can remember items that take less time to pronounce better than items that take longer to pronounce” (Neath and Nairne, 1995, p. 429). In that respect, the length of a brand name, or string length has been identified of influencing memorability (Fan, 2002). Therefore, shorter Chinese brand names are expected to be more memorable than longer ones.

H1a. *Shorter Chinese brand names are more memorable than long ones.*

The study by Gontijo *et al.* (2002, p. 327) showed “string length affected the recognition of common nouns only in the left visual field (LVF) and the recognition of non-words only in the right visual fields (RVF)”. Other studies (Lowrey *et al.*, 2003; Argo *et al.*, 2010) show a positive relationship between brand memorability, measured by brand recall or recognition, and brand meaning (Keller *et al.*, 1998). Moreover, Klink (2003) found that structural characteristics of the brand name play an important role in providing meaning. In this line of argument, whether Chinese brand names sound English (similar to nouns) or not (similar to non-words), we expect to be impacted by a string length and hypothesize the following:

H1b. *Shorter Chinese brand names are more meaningful than long ones.*

Several studies examine the main characteristics impacting the likeability of brand names (Meyers-Levy, 1989). Studies have assessed radical and character level suggestiveness (Lee and Ang, 2003), sound symbolism and semantics (Klink, 2001), brand appropriateness (Pavia and Costa, 1993), or brand distinctiveness (Kohli and Hemnes, 1995) and they all identified desirable or likable characteristics for brand names. Another characteristic of brand names which might impact likeability is string length. Information processing theory suggests that stimuli which are easier to process are considered more favorable or likable (Oliver and Bearden 1985; Richardson *et al.*, 1987; Weber *et al.*, 2005; Song and Schwarz, 2009). This leads to the following hypothesis:

H1c. *Shorter Chinese brand names are more likeable than long ones.*

3.2. *Semantic Relevance*

The study by Klink, (2001, p. 144) shows the “ability to derive meaning from semantic imbeds in a brand name is dependent upon consumers’ language abilities”. Ahn and Ferle (2008, p. 108) argue that information processing theory explains how people form mental representations of words and show that “the origin of language (local versus foreign language) is an influencing factor that could impact people’s attention and comprehension of incoming information”. In this line of argument, we expect the English translation of Chinese brand names which are

semantically relevant to English are perceived more meaningful than those without semantic relevance to English.

H2a. *Chinese brand names with semantic relevance to English are more meaningful than those without.*

Related to the previous discussion, “brand name memorability might be enhanced when the name can be meaningful related to many other concepts already stored in memory [...] the logic underlying this view is that the abundant concepts associated with the brand name word provide rich networks of pathways for retrieving the name” (Meyers-Levy, 1989, p. 197). This suggests that having a brand name in the local language, or (as in our case) a brand name which is semantically relevant to English, is more memorable. Ahn and Ferle (2008, p. 108) examine the way individuals process brand names in their own and foreign language and show that using a “local language is an effective strategy to enhance recall and recognition of the brand name” (Ahn and Ferle, 2008, p. 113). As brand recall and brand recognition are two measures of brand memorability, we expect Chinese brand names which have semantic relevance to English are more memorable than those without semantic relevance and hypothesize the following:

H2b. *Chinese brand names with semantic relevance to English are more memorable than those without.*

The previous discussion about COO shows that “using brand names that evoke foreign associations through, for example spelling a brand name in a foreign language [...] will evoke certain product qualities or evoke a positive association making the brand name more likable” (Melnyk *et al.*, 2012, p. 21). Current research identifies semantics and sound symbolism of brand names (Klink, 2001) as desirable or likable characteristics. Brand names with semantically appropriate words are preferable to those with nonsense words (Baxter and Lowrey, 2011). Therefore we expect that:

H2c. *Chinese brand names with semantic relevance to English are more likeable than those without.*

4. Methodology

We used a 2x2 experimental research design whereby the ‘Westernized’ English versions of a Chinese brand names were grouped by string length (short vs. long) and semantic relevance to English (with vs. without). We also included consumers’ perception of the Chinese language (pronounceability, language familiarity, language attitude) as covariates, as they have been “identified as a factor that may potentially affect responses” (Lee and Ang, 2003, p. 329).

4.1. Participants

We selected U.S. respondents for the following reasons. First, English is the sole official language in the United States. Second, the U.S. is the largest economy in the world and the second largest automobile market (next to China). Finally, “Chinese automobile companies are on the verge of entering developed country markets” like the United States (Fetscherin and Toncar, 2010, p. 169) making our study timely and practically relevant. One hundred undergraduate students from a liberal arts college in the southern U.S. participated in the experiment and were assigned to one of the four experimental conditions (average cell size: 25 respondents). Our cell size is above the suggested minimum of 17 observations per cell by Cohen (1998). It is also an acceptable total number of respondents for an experiment as per Hatcher (1994) and larger than the minimum cases-to-variables ratio of 5:1 according to Gorsuch (1983), Hatcher (1994) and Bryant and Yarnold (1995). Finally, our overall sample size is comparable to previous branding (Swaminathan et. al., 2007) and specifically brand naming studies (Lee and Ang, 2003; Samu and Krishnan, 2010).

While a student sample inevitably places limits on the generalizability of the observed effects, it is justified in our case as the focus is on testing theoretical hypotheses rather than generating population projections. In this context, as Sternthal, Tybout and Calder (1994, p. 208) state, “when the researcher is interested in theoretical explanation, a homogeneous sample is the preferred option [...] lowering inter-subject variance in this way enhances the likelihood of finding support for the theory is true. In such instances, student samples or other homogeneous groups are preferred”. In the same line of argument, more recently Erdem *et al.* (2006, p. 38) note that the smaller “differences in age, socio-demographics, relative income and so forth [...] making possible a clearer attribution of substantive theoretical differences”. Numerous previous

branding and specifically brand naming studies also used student samples (Nebenzahl and Jaffe, 1996; Yorkston and Menon, 2004; Lowrey and Shrum, 2007; Pecotich and Ward, 2007; Zhuang *et al.*, 2008; Duque and Lado, 2010; Samu and Krishnan, 2010; Pike *et al.*, 2010; Argo *et al.*, 2010; Kum *et al.*, 2011; Liang *et al.*, 2011). Finally, as there are no Chinese automobile brands available in the U.S., a homogenous sample allows a better theoretical explanation of our experiment.

Our sample consists of 44 percent male and 56 percent female respondents and all are from the United States (to ensure a homogenous sample). Eleven percent have taken at least one Chinese course. This suggests that the vast majority has never been exposed to Chinese language which allows us to explore their perception of the Chinese language in terms of pronounceability, language familiarity and language attitude.

4.2. Stimuli

Product Category. Chinese automobile brands were chosen as the product category for the following reasons. First, automobiles are relevant to the daily lives of the study participants. According to the U.S. Federal Highway Administration, 87% of those within driving age (including students) have a driving license (Highway Statistics, 2008). Thus, a student sample should not pose a limitation to the study's external validity (Lynch, 1982). Second, foreign automobiles sales in the U.S. account for 49.6% of total sales and automobiles from Asia account for 38% (Automotive News Data Center, 2011). Third, Chinese automobile brands are currently contemplating to enter the U.S. making this study timely and relevant. Fourth, Chinese automobile brands are not yet recognized in the U.S. and therefore participants can evaluate brand names without any previous brand knowledge and limiting response bias. Fifth, there is a significant number of brand names within the product category. Finally, previous brand naming studies also used automobiles as the reference product category (Häubl, 1996; Fetscherin and Toncar, 2010).

Brand Names. A preliminary list of 41 Chinese automobile brands was retrieved from the China Association of Automobile Manufacturers⁴ and the Shanghai Automotive Industry Association⁵.

⁴ <http://www.caam.org.cn/english>

⁵ <http://www.saicgroup.com/english/qyml/fwmy/519.shtml>

We selected Chinese brand names which had an English version. Brand names were analyzed for number of words, number of letters, number of consonants, and number of vowels. Table 1 provides a summary of the linguistic analysis of the English version of Chinese automobile brand names. Analysis of the relative consonant/vowel frequency of them reveals about 60% consonants and 40% vowels. According to Gimson (1988), the relative frequency of consonants in the English language is approximately 61% and 39% vowels. This small difference suggests that consonant/vowel structure should not be a significant confounding factor in the present study.

Insert Table 1 about here

Consistent with our experimental design, we classified brand names into short and long and into those with and without semantic relevance to English. We considered only single word brand names (as these were, by far, most common – see Table 1).

We used the number of letters to classify the brand names into ‘short’ and ‘long’ according to string length. We sought to generate two groups with a similar number of brand names within each group but with a sufficient difference in terms of string length. Five letters was chosen as the ‘short’ string length category, while the category of brand names containing nine to ten letters was determined to have sufficient additional letters to be considered ‘long’; both categories contained a suitable number of brand names to be used as stimuli. A similar approach was used by Gontijo *et al.* (2002) in their brand naming study.

In determining semantic relevance to English, brand names were classified as semantically relevant when they were consisting of English words or morphemes (i.e. Greatwall) or when they had a modified Pinyin spelling that approximated an English word, either aesthetically (i.e. Chery as visually approximating ‘cherry’) or phonetically (i.e. Foton as phonetically approximating ‘photon’). We used a two-step approach to classify the brand names for semantic relevance to English. First, the authors independently classified the brand names into the two groups. Second and similar to the study by Lerman and Garbarino (2002), this classification was

validated by an expert group. In our case, this comprised three independent experts who were fluent in English and Chinese, who were asked to classify the brand names into those with and without semantic relevance to English according to the criteria mentioned above.

We wanted to make sure we have an equal number of brand names in each of the four groups. A final list of 12 brand names, three for each experimental condition, was used. Note only brand names were selected for which the authors and experts *unanimously* agreed on the classification. The following Figure 2 shows the brand names in each of the four experimental conditions.

Insert Figure 2 about here

4.3. Construct Measurement

Dependent Variables. Meaningfulness of the brand names was measured using two items drawn from Schmitt, Pan and Tavassoli (1994), capturing the overall meaningfulness of the brand name and the acceptability of the word as a brand name respectively. Memorability of brand names was measured through the familiarity of the brand name with two items from Zhang and Schmitt (2001) and its overall memorability (Schmitt *et al.*, 1994). Finally, likeability was measured on the four item scale by Allen and Janiszewski (1989).

Covariates. We included three aspects of language perception as covariates: pronounceability, language familiarity and language attitude. First, as the study by Leclerc, Schmitt and Dubé (1994) showed, pronounceability of a brand name can influence the perception of that brand name and we used the items by Song and Schwarz (2009) to measure pronounceability. The second aspect of language perception is language familiarity which has been identified as potentially influencing the perception of brand names (Lee and Ang, 2003). Language familiarity was measured by two items from Oliver and Bearden (1985). The third aspect of language perception consists of the language attitude which has been identified by Lee and Ang (2003) as well as later by Kum, Lee and Qiu (2011) as influencing brand name preferences. It was

measured by three items from Koslow, Shamdasani and Touchstone (1994). Appendix A provides a summary of the measurement items used and associated reliability statistics.

4.4. Procedure

Four versions of a questionnaire were used, one for each of the four conditions of the experimental design. In each condition, participants were presented with three brand names stimuli as shown in Figure 2. Participants were then instructed to read the brand names and rate each on the given scales. The questionnaire had two parts. Part one included items measuring participants' perceptions of the meaningfulness, memorability and likeability of the brand names. The second part measured language perception (ease of pronunciation, language familiarity and language attitude).

5. Results

Meaningfulness, memorability and likeability served as dependent variables, string length and semantic relevance served as independent variables and the three aspects of language perception (ease of pronunciation, language familiarity and language attitude) as covariates. All items were measured along a five-point Likert scale. We calculated the mean values for each construct based on summed-item scores. Table 2 provides descriptive statistics (mean and standard deviation) for the three dependent variables across the four experimental conditions.

Insert Table 2 about here

We also assessed the correlations between the three dependent variables as shown in Table 3. The correlation coefficients are all positive and significant as expected (min= .288; max= .547). We also calculated the shared variance to assess whether the three characteristics of brand names serving as dependent variables are sufficiently distinct. The maximum shared variance was 29.9% (between meaningfulness and memorability) indicating that the three characteristics are sufficiently distinct thus providing complementary perspectives on consumers' brand name

preferences. Finally, we calculated the usability of the items by using the Kaiser-Meyer-Olkin (KMO) test of sample adequacy ($KMO = .699$) and Bartlett tests of sphericity ($\chi^2=471, p < .000$); both provided satisfactory results.

Insert Table 3 about here

5.1. Tests of Hypotheses

In light of the correlated nature of the dependent variables, multivariate analysis of covariance (MANCOVA) was used to test the research hypotheses. Prior to running the MANCOVA, we run Box' test for equality of variances. We obtained non-significant results [$M= 28.321, F=1.474, p > .05$] indicating the covariance matrixes are similar. We also calculated Levene's Test of Equality of Error Variances for each dependent variable to determine equal variances in the groups. We obtained all non-significant values suggesting equal variance among groups. Table 4 (a and b) summarizes the MANCOVA results.

Insert Table 4a and Table 4b about here

As can be seen from Table 4a, we found significant effects for string length [Wilks' lambda = .85, $F= 4.832, p < .05$], semantic relevance [Wilks' lambda = .91, $F = 2.597, p < .10$] and ease of pronunciation [Wilks' lambda = .77, $F= 7.946, p < .01$]. Eta-squared is the proportion of the total variability in the dependent variable accounted for by the variation in the independent variables and/or covariates. Ease of pronunciation accounts for 23% (partial eta squared), string length for 15% and semantic relevance for 9% of the variability of brand name preferences.

Meaningfulness. As Table 4b shows, although the mean differences are in the direction expected, they are not significant for either string length [$F(1,84)= .582, p = .448$] or semantic relevance

$[F(1,84)= 1.255, p = .266]$. The interaction term is also not significant $[F(1,84)= .237, p = .628]$. Thus, we find no evidence that string length or semantic relevance impact meaningfulness of English translation of Chinese brand names and therefore reject H1a and H2a. However, we find a significant effect of ease of pronunciation $[F(1,84)= 7.869, p = .006]$, indicating that Chinese brand names which are easier to pronounce provide more meaning.

Memorability. As Table 4b and Figure 3 show, string length has a significant effect on the memorability of Chinese brand names $[F(1,87)= 14.442, p = .000]$ which supports H1b. We also observe a significant result of semantic relevance on memorability $[F(1,87)= 8.324, p = .005]$ which supports H2b. However, the interaction effect is not significant $[F(1,87)= 1.730, p > .10]$. Perceived ease of pronunciation also significantly affects memorability $[F(1,87)= 15.330, p = .000]$. Figure 3 shows that shorter brand names, whether with or without semantic relevance to English, are more memorable than long ones. This difference is larger for brand names with semantic relevance between short and long string lengths. Interestingly, long brand names with semantic relevance are almost as equally memorable as short brand names without semantic relevance. This suggests that semantic relevance is more important than string length.

Insert Figure 3 about here

Likeability. We find no evidence that string length $[F(1,87)= .004, p = .950]$ or semantic relevance to English $[F(1,87)= .552, p = .460]$ impacts likeability of English translation of Chinese brand names. Their interaction is also not significant $[F(1,87)= .889, p = .348]$ we therefore reject H1c and H2c. However, similar to our previous results, we find a significant effect of the ease of pronunciation on likeability $[F(1,87)= .7.493, p = .008]$, suggesting that Chinese brand names which are easier to pronounce are more likable.

6. Discussion and Conclusion

Despite of the emergence of Chinese brand names internationally, only a single study (Kum *et al.*, 2011) investigates international brand naming strategies of Chinese companies. Kum, Lee and Qui's (2011) paper focused on how to translate the brand name from Chinese to English whereas our this study complement theirs by assessing how consumers' perceive translated Chinese brand names. Our findings provide a better understanding of Chinese brand name preference by Western consumers and contribute to brand naming theory. Specifically, we shed light into how linguistic characteristics such as string length and semantic relevance to English affect meaningfulness, memorability and likeability as well as how respondents' perception of the Chinese language affects Chinese brand name preferences. Table 5 summarizes the results of the hypotheses test.

 Insert Table 5 about here

Our results show that shorter brand names are more memorable than longer ones. We also found that brand names with semantic relevance to English are perceived as more memorable than those without semantic relevance. This suggests that, no matter which specific translational or conversion method used (phonetic, semantic, phonosemantic, Hanyu Pinyin translation), when 'translating' the brand name from Chinese to English it is important to choose a brand name which is short and semantically relevant to English in order to increase brand memorability. It should be noted that there are no interaction effects between string length and semantic relevance, which indicates that they have independent additive effects. This suggests that Chinese companies might follow a semantic (meaning) translation method such as translating the lexical meaning (Hernandez and Minor, 2010).

We also find evidence that pronounceability positively influences consumer's brand name preference in terms of their meaningfulness, memorability and likeability. This suggests that English 'translation' of Chinese brand names needs to be easy to pronounce by Americans. However, as there is no interaction effects between the dependent variables (string lengths and

semantic relevance) and the covariate pronounceability is significant the most successful brand name translation strategy Chinese companies should follow is a mix of semantic and phonetic translation methods known as the *phonosemantic* method. As Chiang (2009, p. 338) states, “the phonosemantic transposition is no longer a translation, but a transcreation of the original brand name”. This was first discussed by Zhang and Schmitt (2001), then by Chiang (2009) and finally by Kum, Lee and Qui (2011). Our study complements the latter one and provides evidence of concrete linguistic characteristics which are important for a successful brand naming strategy.

6.1. Managerial Implications

Our findings have a number of managerial implications.

(1) First, studies have shown effects of words' linguistic characteristics on memorability for these words. In some of these, “memory was operationalized as recall and in others memory was operationalized as recognition” (Lowrey *et al.*, 2003, p. 9). Recall and recognition are relevant for advertising and word of mouth (WOM). As simpler brand names require less cognitive effort and are easier to remember (Keller, 2003), shorter brand names may have a similar effect on the cognition process of consumers. Thus Chinese firms can add inherent memorability to their brand names simply by choosing a name that is shorter.

(2) Second, our findings show that brand names with semantic relevance to English are considered more memorable. This can be achieved by having a translation/conversion which is semantically identical to an English word or is slightly semantically altered from an existing English word. For example *Haier* still maintains some approximate meaning in English (‘Higher’) albeit it is spelled in Chinese Pinyin format. The direct translation does not provide meaning itself (*Haier*), however, it might provide indirect meaning by word suggestiveness or by word associations. The word Haier could be associated to ‘higher’ or ‘hire’. Other examples are Bright or Suning which, again, they are easy to pronounce, sound English and use sound symbolism and positive word associations. On the contrary, examples of Chinese brands which are either difficult to pronounce or sound Chinese are Tong Ren Tang, Shuanghui or ChangYu as

well as examples of Chinese brand name which suggest a COO effect such as Sinopec, PetroChina, China Taiping, or Great Wall.

(3) Third, we show ease of pronunciation influences meaningfulness, memorability and likeability. This is in line with the psychology literature showing that “memory is worse for items that take longer to pronounce, even when the items are equated for frequency, number of syllabus, and number of phonemes” (Neath and Nairne, 1995, p. 429). It also relates to the literature about sound symbolism of brand names which suggest sound symbolism provides meaning where meaning influences memorability (Lowrey *et al.*, 2003). Therefore, what is most important for a successful international brand naming strategy is to make the English translation/conversion easy to pronounce. As Bao, Shao and Rivers (2008, p. 150) point out, “brand names should be easy to pronounce to obtain important repeated word of mouth exposure”. Chinese companies may thus need to invest in marketing campaigns to actually teach consumers how to pronounce their brand name. For example, the American insurance company AFLAC initially relied on its famous quacking duck advertising campaign to introduce to consumers how the brand name should be pronounced as well as a way to recall and recognize it. For Chinese brands, similarly creative advertising could reduce marketing costs, as well as contribute to the visibility of the brand in the target market and word of mouth.

(4) Looking at our overall results in Table 5, they support psycholinguistics research which suggests that “features of brand names themselves might also contribute to their memorability” (Lowrey *et al.*, 2003, p. 7). Our findings advocate carefully choosing an English translation of Chinese brands which is short, sounds familiar to English and is easy to pronounce; has the potential to positively influence consumer preferences. Complementing the study by Kum, Lee and Qui (2011), our results suggest that the most successful brand name translation strategy is a mix of semantic and phonetic translation method known as the phonosemantic method (Zhang and Schmitt, 2001).

6.2. Limitations and Future Research

(1) First, our results indicate that certain brand name dimensions like memorability are influence by linguistic characteristics of brand names but others like meaningfulness and likeability are not. Therefore, there is room for future research to explore which (and how) linguistic

characteristics (e.g., morphemes, letters) influence brand name meaningfulness and likeability. In the same line of argument, further research should assess how dialects among different consumer segments influence brand name preferences (Chan and Huang, 1997)⁶ and how language proficiency influences brand name perception.

(2) Second, while our homogenous student sample allowed us to focus on testing theoretical hypotheses due to lower inter-subject variance (Sternthal *et al.*, 1994) thus “making possible a clearer attribution of substantive theoretical differences” (Erdem *et al.*, 2006, p. 38), surveying a larger pool of non-students should contribute to the external validity and generalizability of our results. An advantage of having a homogenous sample, it still need to be tested, for other English-speaking countries like Australia and the U.K. to assess cross-cultural differences. In addition, future research could explore ‘translation’ or conversion of Chinese brand names to other writing systems in *alphabets* such as Spanish or German as well as other writing systems such as *abjad* like Arabic or Hebrew. Another avenue related to respondent characteristics, is to assess how ethnicity influences brand name perception.

(3) Third, the use of a single product category, automobiles, might restrict the applicability of our findings to other product categories. Future research could consider other consumer products or services, as well as non-consumer categories such as business-to-business product or service brand names.

(4) Fourth, international marketers have to deal with the essential language differences in Western versus Eastern languages. Although our study provides some indication that the best translation (conversion) method between Chinese and English is the phonosemantic one, we did not explicitly assess the effect of the translation method on attitude towards the brand. Future research should investigate this issue further.

(5) Fifth, “extensive country of origin (COO) research shows that consumer rely on various information cues to determine the origin of a brand which influences brand preferences” (Magnusson *et al.*, 2011, p. 458). The literature shows that unknown brands, such as Chinese

⁶ As Francis, Lam, and Walls (2002, p. 101) state, “even though Cantonese and Mandarin belong to the same language (both of them are Chinese dialects), the corresponding pronunciations in Cantonese and Mandarin of the same Chinese character can be drastically different”.

brands in Western markets, are subject to more extrinsic cues like the brand name itself and Chinese companies have long suffered from a negative COO effect. To help “to overcome the negative associations of their home country or to appropriate positive stereotypes of another nation” (Chattalas *et al.*, 2007, p. 68) Chinese companies can brand names which sounds English or German or French or any other language. Our study focused on the semantic relevance to English without further investigating the COO effect. Future study should investigate the *implied* COO and the *actual* COO of the brand name and the (in)congruity between those. A first attempt was undertaken by Melnyk, Klein and Völckner (2012) but they did not explicitly focus on Chinese brand names. As Essoussi and Merunka (2007, p. 423) state, “a measurement of (in)congruity can provide managers with a useful strategic tool offers them a better understanding of how current and potential customers might react to imported goods that carry a specific brand name”. Finally, another avenue of future research is to look at the interaction between brand name and other brand elements such as sound elements (e.g., music, jingles), visual elements (e.g., colors, logo) or brand personality as suggested by Whitelock and Fastoso (2007).

7. References

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Brand Names (n = 41)	Percentage	
# of words	1	85%
	2	10%
	3	5%
# of letters	3	2%
	4	5%
	5	15%
	6	20%
	7	15%
	8	12%
	9	12%
	10	5%
	11+	7%
# of consonants	1	2%
	2	20%
	3	24%
	4	12%
	5	15%
	6	20%
	7+	7%
# of vowels	0 -	2%
	1	39%
	2	34%
	4	15%
	5	10%

Table 1: Linguistic Structure of Chinese Automobile Brand Names

Descriptive Statistics					
	String Length	Semantic Relevance	Mean	Std. Deviation	N
Meaningfulness Scale	Short	English	3.49	.72	24
		Not English	2.75	.81	23
		Total	3.13	.85	47
	Long	English	3.03	.72	20
		Not English	2.69	.71	24
		Total	2.84	.73	44
	Total	English	3.28	.75	44
		Not English	2.72	.76	47
		Total	2.99	.80	91
Memorability Scale	Short	English	4.01	.42	24
		Not English	2.68	.95	23
		Total	3.36	.98	47
	Long	English	2.84	.99	20
		Not English	2.26	.68	24
		Total	2.52	.88	44
	Total	English	3.48	.94	44
		Not English	2.46	.84	47
		Total	2.95	1.02	91
Likeability Scale	Short	English	3.42	.55	24
		Not English	3.09	.60	23
		Total	3.26	.59	47
	Long	English	3.08	.50	20
		Not English	3.21	.71	24
		Total	3.15	.62	44
	Total	English	3.27	.55	44
		Not English	3.15	.65	47
		Total	3.21	.60	91

Table 2: Descriptive Statistics

Correlations			
	Meaningfulness	Memorability	Likeability
Meaningfulness	1		
Memorability	.547***	1.00	
Likeability	.474***	.288***	1

*** < .01; ** < .05; * < .10

Table 3: Correlation Matrix of Dependent Variables

Effect	Value	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power
<u>Independent Variables</u>						
String Length	.85	4.832	.004 *	.15	14.49	.89
Semantic Relevance	.91	2.597	.058 *	.09	7.79	.62
String Length * Semantic Relevance	.98	.667	.575	.02	2.00	.18
<u>Covariates</u>						
Pronounceability	.77	7.946	.000 *	.23	23.84	.99
Language Familiarity	.97	.789	.504	.03	2.37	.21
Language Attitude	.95	1.399	.249	.05	4.20	.36

Table 4a: MANCOVA Results

String Length - Univariate Tests

Brand Dimensions	<i>F-values</i>	<i>p-levels</i>	<i>Eta²</i>	<i>Observed Power</i>
Meaningfulness	.582	.448	.007	.117
Memorability	14.442	.000*	.146	.964
Likeability	.004	.950	.000	.050

Semantic Relevance - Univariate Tests

Brand Dimensions	<i>F-values</i>	<i>p-levels</i>	<i>Eta²</i>	<i>Observed Power</i>
Meaningfulness	1.255	.266	.015	.198
Memorability	8.324	.005*	.087	.814
Likeability	.552	.460	.006	.114

Interaction Effects

	<i>F-values</i>	<i>p-levels</i>	<i>Eta²</i>	<i>Observed Power</i>
Meaningfulness	.237	.628	.003	.077
Memorability	1.730	.192	.019	.255
Likeability	.889	.348	.010	.154

Ease of Pronunciation

	<i>F-values</i>	<i>p-levels</i>	<i>Eta²</i>	<i>Observed Power</i>
Meaningfulness	7.869	.006*	.086	.792
Memorability	15.330	.000*	.150	.972
Likeability	7.493	.008*	.079	.772

Table 4b: Detailed MANCOVA Results

	Meaningfulness	Memorability	Likeability
<i>Main Effects</i>			
String Length	✘	✓	✘
Semantic Relevance	✘	✓	✘
	□	□	□
<i>Covariates</i>			
Pronounceability	✓	✓	✓
Language Familiarity	✘	✘	✘
Language Attitude	✘	✘	✘

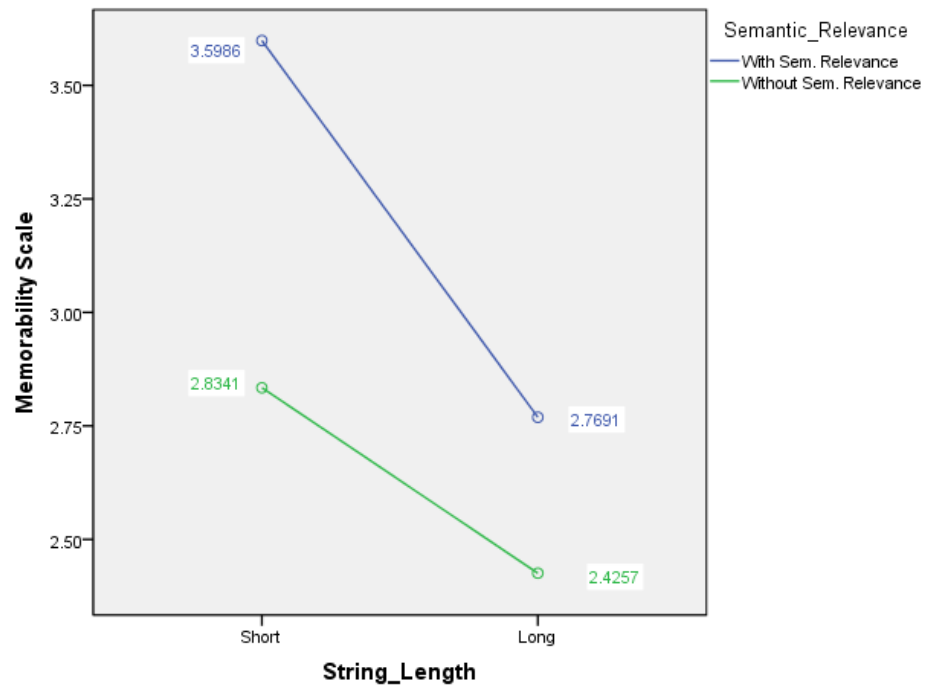
Table 5: Summary Hypothesis-Testing Results

		Consumer Origin	
		Western	Non-Western
Brand Origin	Non-Western	<p>Kum, Lee and Qui, 2011. Focus on translation from Chinese to English</p> <p>This paper. Focus on consumer preference</p>	<p>Chan and Huang, 1997; Chan, Huang, 2001; Huang and Chan, 2005; Lee and Ang, 2003</p>
	Western	<p>Kanungo, 1968; Vanden Bergh, Adler and Oliver, 1987; Schmitt, Pan and Tavassoli, 1994; Keller and Lehmann, 2006; Samu and Krishnan, 2010; Schmitt and Zhang, 2012</p>	<p>Chan, 1990; Hong, Pecotich and Schultz, 2002; Kinra, 2006; Zhang and Schmitt, 2001; Francis, Lam and Walls, 2002; Villar, Ai, Segev, 2012</p>

Figure 1: Literature Review Summary

		Semantic Relevance	
		Yes	No
String Length	Short	(1) Gonow Foton Chery	(2) Lifan Hafei Zotye
	Long	(4) Brilliance GreatWall Southeast	(3) Jinghuai Shuanghuan Changfeng

Figure 2: Classification of Brand Names by Experimental Condition



Covariates appearing in the model are evaluated at the following values: Mean_Language_Pronouncable = 3.5550, MEAN_Language_Attitude_Scale = 3.2021, MEAN_Language_Familiarity_Scale = 1.4628

Figure 3: Impact of String Length and Semantic Relevance on Memorability

Appendix A: Construct Measurement

Measure	Anchors (5-point Likert Scale)	Source
<i>Meaningfulness</i> ($\alpha = .97$)		
How meaningful are the following words as brand names?	not at all meaningful / very meaningful	Schmitt, Pan, & Tavassoli (1994)
How acceptable are the following words as brand names?	not at all acceptable / very acceptable	
<i>Memorability</i> ($\alpha = .89$)		
How familiar do you find the following words?	not at all familiar / very familiar	Zhang & Schmitt (2001)
How memorable do you think this word would be as a brand name?	not at all memorable / very memorable	
<i>Likeability</i> ($\alpha = .87$)		
How good or bad do you find the following brand names?	bad / good	Allen & Janiszewski (1989)
How positive or negative do you find the following brand names?	negative / positive	
How pleasant do you find the following brand names?	unpleasant / pleasant	
How likeable do you find the following brand names?	not at all likeable / very likeable	
<i>Language Pronounceability</i>		
How easy to pronounce are the following brand names?	very difficult / very easy	Song & Schwarz (2009)
<i>Language Familiarity</i> ($\alpha = .85$)		
In general, how familiar are you with the Chinese language?	not at all / very much	Oliver & Bearden (1985)
Would you consider yourself knowledgeable about the Chinese language?	know nothing at all / know a great deal	
<i>Language Attitude</i> ($\alpha = .77$)		
Chinese is a friendly language.	strongly disagree / strongly agree	Koslow, Shamdasani, & Touchstone (1994)
Chinese is a convincing language.	strongly disagree / strongly agree	
Chinese is an influential language.	strongly disagree / strongly agree	