

**A CROSS CULTURAL STUDY OF SYMBOLIC MEANINGS OF PRODUCTS:
PERCEPTIONS OF CHINESE AND NORTH AMERICAN CONSUMERS**

A Thesis

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ABSTRACT

A CROSS CULTURAL STUDY OF SYMBOLIC MEANINGS OF PRODUCTS: PERCEPTIONS OF CHINESE AND NORTH AMERICAN CONSUMERS

Wei Zhang

It has been long recognized in consumer research that consumers buy products and services not only for their utilitarian values and problem solving characteristics, but also for their symbolic meanings. Since culture plays a crucial role in the formation, transfer and communication of symbolic meanings, it is hypothesized that cultural differences may lead to differences in the symbolic meanings that are ascribed to a sample of products/services. A survey of Chinese and Canadian consumers confirms this hypothesis for a list of symbolic meanings that are associated with a sample of products and services that were selected in pilot studies. Averaging across a sample of products/services for a given symbolic meaning, hypothesis tests suggest that more Chinese ascribe utilitarian, interpersonal tie related, financial, and status related symbolic meanings whereas more Canadians ascribe enjoyment, self identity, appearance related, and social responsibility related symbolic meanings with the selected sample of products. However, the differences in the sample proportions are practically very small for symbolic meanings associated with financial value, interpersonal ties and utilitarian value. When the hypotheses are tested at the individual product/service level relatively stronger support is observed with regard to symbolic meanings associated with enjoyment, self expression, self achievement, appearance, status, and social responsibility. In general, the results confirm that the proportion of the population that ascribe a particular symbolic meaning to a product may depend on the culture. Implications of the findings, limitations of the research, and future research directions are discussed.

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TABLE OF CONTENTS

Chapter 1: INTRODUCTION	1
Chapter 2: LITERATURE REVIEW AND THE HYPOTHESES OF THE STUDY	4
2.1 Symbolic Meanings: Conceptual Foundations	4
2.2 The Importance of Symbolic Meanings.....	5
2.3 Contextual Influences on Symbolic Meanings.....	7
2.4 The transfer and Decoding of Symbolic Meanings.....	9
2.5 The Development of the Ability to Recognize Symbolic Meanings	11
2.6 Symbolic Meanings as the Source of Various Kinds of Values that Consumers Ascribe to Products/Services	12
2.7 Symbolic Meanings Identified in Consumer Research.....	15
2.8 Cultural Influences on Symbolic Meanings	18
2.9 Hypotheses of the Study.....	19
Chapter 3: METHODOLOGY	26
3.1. Data Collection.....	27
Chapter 4: ANALYSIS OF DATA AND FINDINGS	29
4.1 Group level versus Individual Inferences	31
4.2 Multiple Hypothesis Testing	33
4.3 Findings	35
4.3.1 Utilitarian Symbolic Meanings.....	36
4.3.2 Symbolic Meanings Associated with Enjoyment.....	39
4.3.3 Symbolic Meanings Associated with Interpersonal Ties	42

4.3.4 Symbolic Meanings Associated with Self Expression	45
4.3.5 Symbolic Meanings Associated with Self Achievement	47
4.3.6 Symbolic Meanings Associated with Financial Value	49
4.3.7 Symbolic Meanings Associated with Appearance	51
4.3.8 Symbolic Meanings Associated with Status	53
4.3.9 Symbolic Meanings Associated with Social Responsibility	55
4.3.10 Summary of Findings	57
4.4 Discussion	58
4.5 Limitations and Future Research	59
References	62
Appendix A: Questionnaire (English)	70
Appendix B: Questionnaire (Chinese)	76

LIST OF TABLES

Table 1: SUMMARY OF HYPOTHESES REGARDING THE RELATIVE EMPHASIS THAT IS PLACED ON VARIOUS KINDS OF SYMBOLIC MEANINGS BY CHINESE VERSUS CANADIAN CONSUMERS	24
Table 2: Symbolic Meanings That Are Expected to Be Relevant for Each Product/Service Studied	30
Table 3: Test of Hypothesis involving Utilitarian Symbolic Meanings.....	38
Table 4: Test of Hypothesis Involving Symbolic Meanings Associated With Enjoyment.....	40
Table 5: Test of Hypothesis Involving Symbolic Meanings Associated with Interpersonal Ties	43
Table 6: Test of Hypothesis Involving Symbolic Meanings Associated With Self Expression	46
Table 7: Test of Hypothesis Involving Symbolic Meanings Associated With Self Achievement	48
Table 8: Test of Hypothesis Involving Symbolic Meanings Associated With Financial Value	50
Table 9: Test of Hypothesis Involving Symbolic Meanings Associated With Appearance.....	52
Table 10: Test of Hypotheses Involving Symbolic Meanings Associated With Status	54
Table 11: Test of Hypotheses Involving Symbolic Meanings Associated With Social Responsibility	56

Chapter 1

INTRODUCTION

Identifying why consumers value a product/service has been a major concern of economics and marketing as well as psychology, anthropology, and sociology among many other disciplines in social sciences. Although economic (utilitarian) reasons and specific problem solving characteristics of products and services are undoubtedly at the top of the list for many products and services (for example a pencil writes and a camera takes pictures), symbolic meanings beyond simple utilitarian values of products (for example, a dress reflects a person's values and a cellular phone helps a teenager to be in the "loop" with her/his friends) have been recognized as the source of value for many products and possessions (Richins 1994; Dittmar 1989; 1991; Prentice 1987; Belk 1992).

In general, the symbolic meanings are argued to develop as a result of socialization and participation in shared activities in a culture (Fiske 1990; Richins 1994). The cultural values play a critical role in shaping and reinforcing the meanings of cultural symbols. Following Richins (1994) and arguing that various symbolic meanings are the sources of value for products and possessions; this study aims to test if the symbolic meanings and therefore the reasons for valuing products/services vary across cultures, namely, China and Canada. Since symbolic meanings are expected to be created over time in shared activities in a culture, hypotheses are developed regarding how the symbolic meanings are likely to differ for consumers in China and Canada. These hypotheses are then tested in a survey where data are collected from two samples in the two countries.

To our knowledge, this will be one of the few pioneering studies (Ger et.al. 1999) that links symbolic meanings of products/services directly to cultural values and cultural differences. Examination of this link will be the major conceptual contribution of this study. In addition, symbolic meanings that are ascribed to a sample of products/services by consumers in two different cultures will be identified. Overall, the study will help us understand the kinds of values that consumers in two different cultures ascribe to products/services. The managers of these products in those cultures should pay attention to the associated symbolic meanings and incorporate them into the design of their marketing programs, especially their communication campaigns.

The next chapter presents a literature review involving symbolic meanings, their importance in marketing, and the types of meanings that have been identified in consumer research. Relying mainly on the types of meanings suggested by Richins (1994), and the literature on cultural values, a set of hypotheses are developed that can be tested in a cross-cultural framework to examine the link between symbolic meanings and cultural values. The following chapter discusses the methodology used: pilot studies to construct a questionnaire and identify a set of products to be used in the final study, and a survey of two samples in Canada and China. The chapter on data analysis and findings compares the Chinese and Canadian samples in terms of the proportion of the respondents who ascribe certain meanings to the identified set of products / services. Since many hypotheses on several products are tested, it is possible to reject some of the hypotheses simply by chance. Dealing with this multiple hypothesis testing problem is a critical part of the discussion in the chapter on data analysis. Next, the findings are presented and the hypotheses that were confirmed are identified. Finally, the last chapter

presents the conclusions, managerial implications and the limitations of the study.

Chapter 2

LITERATURE REVIEW AND THE HYPOTHESES OF THE STUDY

2.1 Symbolic Meanings: Conceptual Foundations

Semiotics, as a field of study, is concerned with the nature of signs and their connotative meanings (Barthes 1968; Noth 1990). Signs are interpreted in light of cultural values by observers to arrive at a “connotative meaning” that is sometimes referred to as “subjective meaning” (Barthes 1968). This sense of meaning is similar to what Szalay and Deese (1978) call “psychological meaning”: subjective perceptions and affective reactions to an object.

According to Merriam-Webster dictionary, meaning is “the thing one intends to convey especially by language”. Some researchers believe that the ability to form and communicate meanings through symbols is the central unique characteristic of human species (Boulding 1956, p. 44). Through the use of language, humans can form and convey “subjective meaning” or “psychological meaning” to express their values and ideas (Barthes 1968; Szalay and Deese 1978). People endow different objects with different meanings that may be conditional on different circumstances.

In marketing literature, researchers focus their attention on the symbolic meanings of products/services to consumers and investigate the influence of symbolic meanings on consumer behaviour. Kleine and Kernan (1988) define symbolic meanings of products/services as the meaning to an individual of a consumption object that reflects that person's aggregate perception of the object. This perception consists of two dimensions: an interpretation of the physical attributes of the product and its action

potential. These perceptual dimensions vary in salience among objects and individuals in different contexts in which the object is perceived. This definition includes three characteristics: Polysemy, Contextual Sensitivity, and Consensus. Polysemy means that a product/service can represent more than one meaning. Contextual sensitivity refers that the meanings of products/services may vary according to different contexts. Consensus reflects that every single person may have special information about a product/service, but consumers collectively must share some minimal amount of information (meaning) about the product/service so that they can communicate about it.

2.2 The Importance of Symbolic Meanings

The importance of symbolic meanings have long been recognized in consumer research and marketing. Mick (1986) argues that symbolic meaning is "...at the nucleus of consumer behaviour". We are living not only in a physical phenomenal world, but also in a psychological world that consists of our subjective perceptions about ourselves and all the objects around us. Almost every object means some thing to us. In a word, consumers are vividly living in a world full of meanings which are interpreted and introduced by other consumers and marketers. Symbolic meanings of products/services influence consumers' decisions regarding the search, purchase, use, and disposal of products/services. They help consumers establish their identities, acculturate into a culture, express themselves and their extended selves... (Mehta and Belk 1991; Penaloza 1994; Kleine, Kleine, and Allen 1995; Belk 1988).

Mehta and Belk (1991) investigate the symbolic meanings of possessions of Indians in India and Indians who immigrated to the United States. They find that symbolic

meanings of possessions help people establish their identity in different environments. Indians in India and Indians who immigrated to the United States tend to emphasize different symbolic meanings of different possessions to define who they are, who they were, and who they hope to become. Their investigation shows that symbolic meanings of possessions play an important role in the identity maintaining or reconstructing for both native residents and immigrants.

Penaloza (1994) finds that many products (food, clothes, and automobile) and services (telephone, financial services, and media) help Mexican immigrants in United States acculturate into American culture. Mexican immigrants use the symbolic meanings these products/services provide to accelerate their acculturation process in United States, since these symbolic meanings of products/services in United States are different from those in Mexico. The differences of symbolic meanings help Mexican immigrants adapt the new culture.

Kleine, Kleine, and Allen (1995) find that people use possessions to define “me” or “not me”. They define a concept-Material Possession Attachment to describe the relationship between people and a certain possession of theirs. Possessions of strong attachment (most favourite possessions) usually help people to build up proximal self; possessions of weak attachment (least favourite possessions) often represent “not me”. Using different possessions, people can express who they are or who they are not.

Belk (1988) extends the study of identity-symbolic meanings of possessions from “self” to extended self. Belk (1988) argues that symbolic meanings of possessions can extend the concept of self. The meanings can enrich the owner’s identity and allow her/him to convince her/himself to become a different person than she/he would be

without the possessions. With the help of symbolic meanings of certain possessions, the owner can become a more colourful individual.

In general, from a semiotics points of view, the signs and symbols (that is, the products and possessions) serve as the fundamental vehicles that connect symbolic meanings and consumers (McCracken, 1986). From this point, we can see that sometimes products/services are not the ultimate end for consumers. Consumers choose different products/services not because of the products/services themselves, but because of the symbolic meanings that the products/services possess. These symbolic meanings comfort consumers in a cultural way and fulfil their needs in different situations. Without the symbolic meanings, the product/service is not a complete package any more and is meaningless to consumers.

2.3 Contextual Influences on Symbolic Meanings

Symbolic meanings of products/services are theorized not to exist solely by themselves: consumers interpret the symbolic meanings according to the contexts in which products/services appear. Several researchers have argued that contextual influences on symbolic meanings are crucial in the meaning generation and transfer process, because symbolic meanings not only vary according to different products/services and different individuals, but also vary in different contexts (Kleine and Kernan 1988; Richins 1994). For instance, a bicycle may represent different meanings to its owners when it is used as a way of transportation than as a way of exercising. It may take the symbolic meaning of social responsibility when used for transportation purposes. However, it may mean relaxation or enjoyment when it is used for exercise.

More specifically, Kleine and Kernan (1991) further argue that for consumers' perceptions of symbolic meanings of products/services, there are two types of context: external context (available to the individual externally) and psychological context (available to the individual internally). External context includes all the features of the individual's environment; and psychological context consists of the individual's store of experiences of products/services. Consumers interpret symbolic meanings of products/services in both external context and psychological context at the same time. People may perceive different meanings for the same product/service in different external contexts. A bicycle in China may not mean the same thing as it does in Canada. Even in the same external environment, people may still perceive the same product or service differently due to differences in individual psychological contexts: different people may simply have different experiences about the same product/service even in the same external environment.

External context includes all the features of the environment. Among those features, culture is possibly one of the most important ones. We use culture to describe and coordinate our phenomenal world so that we can better apprehend it (McCracken, 1986). An individual's psychological context is strongly affected by her/his cultural knowledge and life experiences (Kleine and Kernan 1991; Thomson, Pollio, and Locander 1994). As we can see, culture influences both the external and psychological contexts and further influences consumers' perception of symbolic meanings. In sum, people from different cultural backgrounds have different interpretation contexts, and as a result, they may have different perceptions of symbolic meanings for same products/services. In different contexts, meaning is created, maintained and altered by the perceptual interpretation

process (Mick 1986; Kleine and Kernan 1991).

2.4 The Transfer and Decoding of Symbolic Meanings

Unlike physical attributes, products/services do not possess symbolic meanings immediately after they are introduced, since symbolic meanings are not as tangible and visible as physical attributes are. People can not physically see and feel the existence of symbolic meanings. Symbolic meanings are people's psychological perceptions of certain objects which keep moving from place to place and from one owner to another, which makes it harder to keep track the movement of symbolic meanings. However, we can trace the trajectory of the movement of symbolic meanings with the help of the findings in marketing research.

The meanings are originally located in a culturally constituted world in which we are living (McCracken, 1986). Culture creates all kinds of meanings for our world. Furthermore, it helps shape and constitute our world with meanings. Culture provides us with cultural categories and cultural principles. Cultural categories give us the fundamental coordinates of meaning (McCracken, 1986) which enable us to segment the culturally constituted world. For example, all cultures have categories of time, space, nature, and person, etc... These cultural categories help us create all kinds of distinctions so that we can identify the different parts of the phenomenal world around us. Cultural principals are the meanings in the ideas or values that tell us how our world is organized, evaluated and constructed. Therefore, meanings serve as cultural categories and cultural principles to give our world a clear cultural view. Moreover, culture helps us to see and understand this world in a cultural way. We see this world through cultural "lens" which

helps us understand all sorts of meanings that exist in the world. In a word, culture provides the phenomenal world with meanings and enables us to see and understand the meanings in the world.

The meanings are not restricted only in the culturally constituted world; they are constantly mobile (McCracken, 1986). Though people are all living in this culturally constituted world, they usually do not obtain symbolic meanings directly from it. Symbolic meanings usually pass through certain objects (products/services) to consumers. This means that symbolic meanings first have to be transferred from the culturally constituted world into products/services. This transfer takes place through various ways (McCracken, 1986). One good example is advertisement. By connecting familiar meanings in the culturally constituted world and the consumer goods/services, advertisements try to establish a relationship between the meanings and the goods/services. A successful advertisement will finally convince consumers (viewers) to believe the established relationship between the meanings and the good/service. Eventually, when consumers want to utilize the symbolic meanings, they will choose to purchase the corresponding product/service. As a result, nowadays, advertising is focusing more on transferring new ideas and values of products/services instead of just focusing on simple utilitarian characteristics. Marketers hope that consumers will choose their products/services because of the symbolic meanings they transferred by successful advertisement.

Symbolic meanings that are transferred from the cultural world to products and services are further transferred to the consumers themselves through various kinds of rituals (McCracken, 1986). This transfer is facilitated through possession, exchange,

grooming, and divestment of products/services according to individual needs in different situations. Furthermore, products/services function as a vehicle that link consumers and symbolic meanings (McCracken, 1986): consumers can express their ideas and values (meanings) about themselves and about the world by the transferred symbolic meanings from products/services. Belk, Bahn, and Mayer (1982) add that consumers use consumption products to encode meanings so that they can strengthen their self-images and sex-roles.

2.5 The Development of the Ability to Recognize Symbolic Meanings

Meanings can be noticed in almost every corner of our world. However, since they are “psychological meanings” (Szalay and Deese 1978) and are not tangible, it is not easy for people to recognize the symbolic meanings of products/services under different conditions and times. As a result, it is important for people to learn how to recognize the meanings in different situations.

It is argued in the literature that consumers develop the ability to recognize consumption symbols over time, especially during their childhood, and cultural values affect this process of development considerably. Children sharpen their skills to decode symbolic meanings of products/services from media, family, schools, and peers (Belk, Bahn, and Mayer 1982). Belk, Bahn, and Mayer (1982) argue that the ability develops in an incognizant situation while children watching the media, living with the family, studying at school and playing with peers. Their perceptions of the world evolve through socialization and participation in those various shared activities. When participating in those activities, children are unaware that they are observing and learning to understand

all kinds of meanings. In reality, not only children develop the ability of recognizing different meanings through all kinds of activities, sometimes adults have to learn or further develop this ability under different situations. For example, new immigrants coming to a new country have to adapt different meanings for same products/services (Mehta and Belk 1991, Penaloza 1994).

However, most of the time, children/people from same cultural group or background participate in common social activities. They may be from the same community, same school, or same religion. Thus, individuals with similar acculturation experiences usually exhibit considerable similarity in the meanings that they attach to various symbols, including products and services. In this process, cultural values play the role of a “lens” through which the objects of consumption are interpreted to gain symbolic meanings (McCracken, 1986). Supporting these expectations, Kleine and Kernan (1991) also suggest that cultural knowledge is crucial in the interpretation of objects around us. Similarly, Thomson, Pollio, and Locander (1994) argue that people’s life experiences are always influenced by their cultural backgrounds.

2.6 Symbolic Meanings as the Source of Various Kinds of Values that Consumers Ascribe to Products/Services

As it was discussed above, cultural values play an important role in the meaning transfer process. At the same time, symbolic meanings are the potential source of various kinds of values that consumers may ascribe to products/services (Bloch and Richins 1983; Csikszentmihalyi and Rochberg-Halton 1981; Douglas and Isherwood 1979). Despite these theoretical and empirical developments, the traditional economics literature mainly

focuses on value in the context of exchange (Richins 1994): the value of a product or a service is measured according to the price a consumer is willing to pay in exchange for the utilities or satisfactions the product/service provides. In traditional marketing literature, value is considered beyond price and consumers' perception of value when facing with choices of products/services is brought into the picture: value is emphasized as involving a relationship between products/services' quality and exchange price (Bolton and Drew 1991). Consumers are willing to pay higher prices if they want to receive products/services with higher quality.

More recently, researchers have emphasized that quality is only one of several types of value that consumers derive from an exchange in the marketplace (Holbrook 1994). Sometimes, consumers choose products/services not only because of their quality, but also because of something other than quality. For example, Richins (1994) suggested that the value to consumers of a product or service can be divided into market exchange value and value in use. Value in use refers to the usefulness or importance of a product/service to the consumers. Utilitarian characteristics of product/service are only part of the value in use. More generally, value in use includes many other benefits products/services provide that go far beyond the tangible utilitarian characteristics. A product/service can be low in exchange value but high in value in use to the owners. For instance, a single bottle of wine may not have a very high exchange value for a consumer when she/he buys it. However, it may have very high value in use if the wine brings the consumer pleasant relaxation, enjoyment, or even a romantic night that she/he needs. Another example is internet service. Its value is not only judged in terms of the subscription fee a consumer

pays but also in terms of the entertainment, education, and communication it provides and the extent to which it develops the person.

Market exchange value comes from consumers' market exchange ritual; value in use arises from consumers' possession or usage process of products/services. During this process, consumers interact with products/services and consequently, products/services may begin to mean something more than what was initially purchased. For example, consumers interact with products/services during possession rituals, grooming rituals, and divestment rituals (McCracken, 1986). During those rituals, even during exchange ritual, meanings are transferred and sometimes created from cultural environment to goods, from goods to consumers, and from consumers to consumers. Thus, products/services eventually have additional symbolic meanings to consumers. From that point on, market exchange value alone can not represent the complete value of the products/services to the owners. For instance, the owner of a book which has market value of \$ 10 \$ may consider the value of the book to be much more the \$ 10 after she/he read the book, since now the book may mean a wonderful and entertaining self-relevant story or an incredible learning experience that sheds light on an issue that the owner wondered about for a long time.

The point that symbolic meanings of products/services and possessions are the source of value for consumers has long been recognized in consumer research (Bloch and Richins 1983; Richins 1994; Douglas and Isherwood 1979). For example, products/services sometimes can communicate information (meaning) for their owners (Douglas and Isherwood, 1979). They can tell people about the owners' interests, social status, and economic wellbeing. Similarly, certain products/services can help establish and reflect self identity (Belk 1988; McCracken 1986). As reported by Richins (1994),

many consumers refuse to put a market price on some of their possession since the objects are more than commodities for them. The objects provide more than just utility; consumers ascribe personal meanings to them. In other words, the value of possessions resides in their symbolic meanings and economic (utilitarian) value is only one of various types of meanings that consumers may ascribe to products and services.

2.7 Symbolic Meanings Identified in Consumer Research

Every consumer may develop her/his individual symbolic meanings for products and services due to her/his unique experiences in life. However, as a member of a cultural group, the individual shares some common features of the culture with their group members. As a result, a cultural group as a whole usually ascribes similar meanings to the same products/services. Consequently, consumer possessions may have private and public symbolic meanings associated with them (Richins 1994). Private meanings of a product/service are all the meanings held by a particular individual with regard to that product/service. Public meanings are the meanings recognized and shared by all cultural group members with regard to certain products/services. These meanings are formulated and communicated during social interaction and cultural development processes (Richins 1994). During these processes, people with the same background and the same life experience develop similar perceptions on some aspects of symbolic meanings of products/services. Those common symbolic meanings are conceptualized as public meanings. The majority of the people in a cultural group usually share the same public meanings, while private meanings may be different for every individual.

The private symbolic meanings can be classified into several general categories.

Richins (1994) (see also Dittmar 1993) theorizes and empirically shows that possessions can be important to consumers not only for their utilitarian meanings, but also for the meanings associated with personal enjoyment, representation and improvement of interpersonal ties, self-expression, symbolizing and displaying personal history, financial value, improved appearance, status (prestige), and providing a link with the spiritual world. She argues that consumers own objects for any subset of these symbolic meanings not only for utilitarian reasons.

The classification of symbolic meanings identified by Richins (1994) constitute the basic framework of our study. Therefore, it is informative to expanding on the discussion of the symbolic meanings identified by Richins (1994). The first type of symbolic meaning is utilitarian symbolic meaning and it involves what necessity a possession can provide for, the extent to which the possession can give the consumer freedom and independence, and also how much it enhances work efficiency or effectiveness. The possession is valued for performance or functional attributes. Symbolic meanings associated with enjoyment involve the value the possession can provide the possessor in terms of pleasure, relaxation, comfort, escape, and companionship, and allow performance of enjoyable activity. As a third type of symbolic meaning, interpersonal ties refer to what the possession represents in terms symbolic ties to relevant others and how much it facilitates establishing and nurturing interpersonal ties. The possession may be gifts or symbols of familial history. A fourth type of symbolic meaning suggested by Richins (1994) is related to self identity and constitutes value for the consumer simply because the possession can be regarded as part of self identity or can be used in self-expression. The possession may represent personal achievements, may be a source of

pride, or it symbolizes personal history. Symbolic meanings associated with financial aspects of possessions basically refer to their the investment value. The possession can be an expensive item and provide equity and financial security. Appearance-related symbolic meanings may relate to the appearance of the possessor or how the possessor feels regarding how she/he looks, or relate to the appearance of the possession. Symbolic meanings associated with status involves the possessors' concern regarding how others think of herself/himself due to the social prestige and status value of the possession. Finally, the symbolic meanings associated with providing a link with the spiritual world involve the value that the possessor ascribes to a possession due to its perceived function as providing a spiritual link to divine or higher forces and giving the possessor spiritual peace (Richins 1994).

Although the classification of symbolic meanings introduced by Richins (1994) is rather comprehensive, we felt the need to include two other types in our study. The study by Richins (1994) was conducted more than a decade ago and it was focused on North American consumers. Over the years, however, some new meanings emerged. Ger et al (1999) find out that consumers' consumption patterns begin to be influenced by societal problems, such as environmental issues. Some consumers tend to choose a product/service which allows them to benefit the environment or solve societal problems. The study by Ger et al. (1999) suggests that "social responsibility" as a potentially relevant symbolic meaning in our study.

In our study, we decide not to use the symbolic meanings of providing a link with the spiritual world since because of different societal and educational systems, people's understanding it's related to religion and spiritual link is very different.

In summary, in our study, we will investigate the following symbolic meanings: utilitarian, personal enjoyment, interpersonal ties, self-expression, symbolizing and displaying personal history, financial value, improved appearance, status (prestige), and solving societal problems.

2.8 Cultural Influences on Symbolic Meanings

Cultural values as a concept includes elements such as shared values, beliefs and norms that collectively distinguish a particular group of people from others (Pizam et al., 1997). There is little doubt that culture is one of many forces influencing consumer decision making (Assael, 1987; Pizam and Sussmann, 1995; You et al., 2000). And culture influences our interpretation of symbolic meanings of products (McCracken, 1986; Thompson, Pollio, and Locander, 1994). However, except for a limited number of efforts (e.g. Ger et al), there are not many studies that have investigated the influences of cultural differences on perception of symbolic meanings.

As discussed above, culture influences the formation of symbolic meanings, the contexts of symbolic meanings, their transfer process, and consumers' recognition of symbolic meanings of objects in a society. Hence, a central thesis of this research is that differences in cultural values may lead to differences in the relative emphasis placed on the kinds of symbolic meanings associated with the same set of products/services across cultures. These differences in the relative emphasis are likely to be detected especially when specific symbolic meanings are compared for societies with distinct cultures such as China and Canada.

As summarized in the next section, a set of testable hypotheses are formulated

predicting what type of symbolic meanings are likely to be emphasized more by either the Chinese and Canadian consumers given a sample of products and services that are selected such that they cover all types of symbolic meanings identified in our pilot study and in the literature (Richins 1994; Ger et al 1999). This study tests the hypotheses that are stated in next section and summarized in Table 1. The hypotheses are formulated with regard to each of the symbolic meanings mentioned in the previous section.

2.9 Hypotheses of the Study

2.9 H1 Utilitarian Symbolic Meanings:

Since advertising is an important way to transfer cultural meanings (McCracken 1986) and advertising appeals can reflect cultural values (Tse, Belk, and Zhou, 1989), many researchers have gained considerable insight into cultural meanings and values through advertising content analysis. Among those researchers, Tse, Belk, and Zhou (1989) and Zhang and Harwood (2004) find that in advertisings in People's Republic of China, utilitarian values are the dominant value themes. Therefore, we infer that Chinese people are more likely to emphasize the utilitarian values of the products than their Canadian counterparts. Therefore, it is expected that:

H1: Utilitarian meanings will be attributed to a sample of products/services more by Chinese than by Canadians.¹

2.9 H2 Symbolic Meanings Associated with Enjoyment:

Individualistic cultures tend to be less interconnected and more independent, focusing on personal rather than group goals and preferences. Moreover, individualists value power, achievement, hedonism, and self-direction (Schwartz, 1992). Generally, in collectivistic cultures, people define themselves according to their group membership (e.g., family, country), and they emphasize group norms, goals, and needs over personal ones (Triandis, 1995). Additionally, collectivists value benevolence, tradition, and conformity (Schwartz, 1992). In general, China is regarded to have stronger collectivist values as opposed to cultural values that emphasize individualism in the West including Canada. As expected, according to Hofstede's model of cultural differences (1991), China scores lower on Individualism Index (IDV) than Canada does, with scores of 20 and 80, respectively. Therefore, it is expected that:

H2: Symbolic meanings associated with enjoyment will be attributed to a sample of products/services less by Chinese than by Canadians.

2.9 H3 Social Meanings Associated with Interpersonal ties:

The Chinese attach extreme importance to "Guanxi", interpersonal ties for the long-term success because of their Confucian values (Keller and Kronstedt, 2005). A

¹ To be consistent with Richins' study (1994), utilitarian meanings studied were "allows me to be efficient in my daily life or work", "has a lot of practical usefulness", and "provides me freedom or independence". Our pilot studies suggested that "allows me to be efficient in my daily life or work" and "has a lot of practical usefulness" had different meanings across our Chinese sample. So they were eventually dropped from study. Therefore, what we call utilitarian meanings is basically "provides me freedom or independence" in our study.

High Individualism ranking indicates that individuality and individual rights are paramount within the society. Individuals in these societies may tend to form a larger number of looser relationships (Hofstede, 1991). And according to Hofstede's model of cultural differences (1991), China scores lower on IDV than Canada does. Therefore, it is expected that:

H3: Symbolic meanings associated with interpersonal ties will be attributed to a sample of products/services more by Chinese than by Canadians.

2.9 H4 Symbolic Meanings Associated with Identity:

Based on an analysis of self within social and cultural contexts, Jun (2005) finds that compared to eastern people, western people tend to be more atomistic, separate, autonomous and self-centered. Moreover, Hofstede (1991) finds that a High Individualism ranking indicates that individuality and individual rights are paramount within the society (Hofstede, 1991). According to Hofstede's model of cultural differences (1991), China scores lower on IDV than Canada does. Therefore, it is expected that:

H4: Symbolic meanings associated with identity will be attributed to a sample of products/services less by Chinese than by Canadians.

2.9 H5 Symbolic Meanings Associated with Financial Value:

Hofstede (1991) argues that people from societies with long-term orientation tend to

have large savings and have funds available for investment, but people from societies where short-term orientation is more dominant tend to have small savings and have less funds for investment. According to Hofstede's model of cultural differences (1991), China scores significantly higher on Long-term Orientation Index (LTO) than Canada does, with scores 118 and 23, respectively. Therefore, it is expected that:

H5: Symbolic meanings associated with financial value will be attributed to a sample of products/services more by Chinese than by Canadians.

2.9 H6 Symbolic Meanings Associated with Appearance:

It is argued in the literature that Western cultures emphasize personal appearance (Bloch and Richins, 1992; Netemeyer, Burton, and Lichenstein 1995). In comparison, Durvasula, Lysonski, and Watson (2001) report that their Chinese sample scores lower on "physical concern" than their western counterparts- U.S. and New Zealand samples. Therefore, it is expected that:

H6: Symbolic meanings associated with appearance will be attributed to a sample of products/services less by Chinese than by Canadians.

2.9 H7 Symbolic Meanings Associated with Status:

Bond (1996) has found that according to Confucian values, a gentleman should live a lifestyle reflecting his high social status. Belk and Zhou (2004) also find that Chinese consumers tend to choose status goods for the sake of mianzi (prestige face). Therefore, it

is expected that:

H7: Symbolic meanings associated with status will be attributed to a sample of products/services more by Chinese than by Canadians.

2.9 H8 Symbolic Meanings Associated with Social Responsibility:

China is a developing country in transition from a planned to a socialist market economy. During this difficult period of transition, cultural values are changing and new ones are being formed. The formation of new moral rules and regulations, business ethics and professional morality may not have resulted in a stable social environment yet. As a result, the sense of social responsibility and obligation may have been weakened (Harvey 1999). Furthermore, when the individuals of the society are simply trying to survive economically, social responsibility may not be high on their personal agenda. Therefore, it is expected that:

H8: Symbolic meanings associated with social responsibility will be attributed to a sample of products/services less by Chinese than by Canadians.

TABLE 1: SUMMARY OF HYPOTHESES REGARDING THE RELATIVE EMPHASIS THAT IS PLACED ON VARIOUS KINDS OF SYMBOLIC MEANINGS BY CHINESE VERSUS CANADIAN CONSUMERS

Symbolic Meaning ²	Description of Symbolic Meaning	Hypothesis ³	Support for the Hypothesis
Utilitarian	Allows me to be efficient. Has a lot of practical usefulness. Provides me freedom or independence.	Chinese	Advertising in People's Republic of China has been dominated by utilitarian values (Tse, Belk, Zhou (1989; Zhang and Harwood 2004)
Enjoyment	Provides enjoyment, entertainment, relaxation. Improves my mood.	Canadians	Individualist societies value hedonism and self-direction (Schwartz 1992). Canada scores much higher on Individualism scale compared to China (Hofstede 1991). In China collectivist values have been prominent.
Represents and Facilitates Interpersonal ties	Reminds me of my relationship with a particular person, reminds me of my family. Allows me to spend time with others or share activities with them.	Chinese	Chinese attach extreme importance to "Guanxi" (interpersonal ties) for the long term success because of their Confucian values (Keller and Kronstedt 2005). Also, collectivist values are prominent in China in comparison to individualist values.
Self Identity	Allows me to express myself. Expresses what is unique about me. Requires a lot of effort to acquire and maintain. Represents my skills and achievements.	Canadians	Jun (2005) finds that compared to eastern people, western people tend to be more atomistic, separate, autonomous, and self-centered. Also, the argument involving collectivism versus individualism can be made here as well.

² See Richins (1994), page 519 for a list.

³ Hypothesis relates to whether more Chinese or Canadian consumers will mention the symbolic meaning appearing in the same row as important to them. For example, an entry of "Chinese" means that more Chinese than Canadian consumers will mention the related symbolic meaning as important to them for a sample of products/services.

TABLE 1 CONTINUED

Symbolic Meaning ⁴	Description of Symbolic Meaning	Hypothesis ⁵	Support for the Hypothesis
Financial Aspects	Is valuable in terms of money	Chinese	According to Hofstede's model of cultural differences (1991), China scores significantly higher on long term orientation than Canada does. Hofstede (1991) argues that long-term orientation societies tend to have large savings and funds for investment in comparison to societies with short-term orientation. So, monetary impact of purchase and ownership will be mentioned more by the Chinese. Also, average level of income is lower in China making the investment in the product relatively more important for them
Appearance Related	Is beautiful and attractive in appearance. Improves my appearance.	Canadians	Western cultures emphasize personal appearance (Netemeyer, Burton, Lichenstein 1995; Bloch and Richins 1992). Moreover, Durvasula, Lysonski and Watson (2001) find that Chinese sample scores lower on physical concern than their western counterparts.
Status	Has social prestige value. Gives me social status. Makes others think well of me.	Chinese	Bond (1996) has found that in Confucian values, a gentleman should live a lifestyle reflecting his high social status. Belk and Zhou (2004) also found that Chinese consumers tend to choose status goods for the sake of "mianzi" (prestige face).
Social Responsibility ⁶	Allows me to contribute to solving societal problems.	Canadians	China is a developing country and it is in transition from a planned economy to a "socialist market economy". Harvey (1999) argues that the formulation of moral rules and regulations, business ethics and professional morality has not kept up with the pace of economic reforms.

⁴ See Richins (1994), page 519.

⁵ Hypothesis relates to whether more Chinese or Canadian consumers will mention the symbolic meaning appearing in the same row as important to them. For example, an entry of "Chinese" means that more Chinese than Canadian consumers will mention the related symbolic meaning as important to them for a sample of products/services.

⁶ Suggested by Ger, et. Al. (2000)

Chapter 3

METHODOLOGY

The hypotheses of the study involving symbolic meanings of products and services were tested by using data that were collected in two surveys, one in Canada and one in China. The surveys were preceded with two pilot studies.

One of the critical methodological concerns of the research is the choice of the sample of products/services. To decide on this list of products and services, a convenience sample of 24 Chinese consumers who have recently moved to Montreal, Quebec, Canada and who were in the age bracket of the final samples taken were been contacted. A questionnaire was used to identify a list of products/services where all of the eight types symbolic meanings that were discussed in the literature review chapter were presented to the subjects. Each subject indicated if each phrase that refers to a symbolic meaning in the questionnaire can be used to describe a set of products and services that were determined judgmentally and also by referring to the products / services mentioned by Richins (1994). The products and services that were eventually kept for further study were the ones that were mentioned most often by the respondents.

The second pilot study (27 Chinese, 20 Non-Chinese Canadians with western roots) deals with the testing of the final questionnaire and refining the list of products/services to be included in the final survey. The list of products that were determined in the first pilot study were presented to both samples and the respondents were asked to indicate if the phrases given in the questionnaire in Appendix A could be used to describe the each of

the products or services mentioned. The products where the frequency of mention were very low for both samples on the majority of the symbolic meanings were eliminated leaving a list of 20 items for our survey. Furthermore, the pilot study was used to improve the wording of the questionnaires, especially the Chinese version which was translated from English to Chinese by the researcher. The feedback from bilingual Chinese subjects who were also trained in research methodology in a graduate course was especially helpful.

3.1 Data Collection

The data for the study are collected by a survey of two samples of university students, one in Shaoxing, Zhejiang, China and one in Montreal, Quebec, Canada. The survey includes a self-administered questionnaire involving a “check list” of symbolic meanings that were mentioned in the hypotheses section above. Also a sample of 20 products and services that were identified in the pilot studies is provided for the subjects. The subjects are asked to check the symbolic meanings that they thought were appropriate for each of the 20 products/services. Please see Appendices A and B for the English and Chinese versions of the questionnaires, the list of 14 symbolic meanings included in the study, and also the list of 20 products and services.

The final survey involves 146 completed and usable surveys from a university in Shaoxing, Zhejiang, China and 123 surveys from a university in Montreal, Quebec, Canada. Both studies involved data collection in groups where the subjects were invited to a prespecified location after recruitment. The samples were mainly convenience samples and involved subjects who responded to ads placed in high traffic areas on the

respective campuses. After arriving at the advertised location at a certain time, the subjects were handed the questionnaires, requested to pay special attention to the instructions, and then asked to complete the questionnaires at their own pace. At each data collection session, subjects remained in the room until all respondents completed their questionnaires. The data collection sessions in China were carried out by a faculty member teaching a research course. The ones in Canada were carried out by the researcher. The subjects in both samples were paid for their participation in the study. The subjects took on the average 15-20 minutes to complete the questionnaires.

A potential problem with a sample from Montreal, Quebec, Canada if subject qualification is not controlled is that it is likely to be of multicultural nature involving possibly respondent from Asian countries as well as western ones. Since the respondents from eastern Asian countries may share some of the cultural values of the Chinese sample, a set of qualifying questions was used to make sure that the Canadian sample included respondents mainly with western cultural roots. The respondents who participated in the Canadian study (1) were born in Canada, (2) spoke English and/or French fluently, (3) considered themselves and their families to be of European origin, and (4) communicated with their friends and family members mainly in European languages. If respondents did not meet these criteria, their data were dropped from our final data analysis.

Chapter 4

ANALYSIS OF DATA AND FINDINGS

The collected data were simply coded as binary variables and then analyzed by expressing the proportion of respondents in each sample who ascribe each symbolic meaning with a particular product /service. A test of the difference of proportions was conducted for each product/service and symbolic meaning combination. Each test was a directional test since a priori whether a given difference in proportions for the Canadian and Chinese samples was specified in our hypotheses as summarized in Table 1.

As discussed above, we found 14 symbolic meanings related to the eight hypotheses that were presented and each these symbolic meanings was expected to be related to only some of the 20 products/services that were identified in the pilot studies. It is unrealistic to expect all symbolic meanings to be associated with all 20 products/services. For instance, consumers will not think of “Is beautiful and attractive in appearance” when referring to an internet service. If the binary data for each of the 14 symbolic meanings are averaged across all 20 products/services, it is likely that those symbolic meanings that are ascribed to only a few of the products will be averaged with the rest of the data where the data will be dominated with “zeros” instead of “ones”, masking any meaningful differences that may exist across the two samples only for a few relevant products. Therefore, it was decided to review the final set of 20 products/services and then judgmentally select a subset of the products for which a given symbolic meaning might be relevant irrespective of culture. Table 2 below summarizes the symbolic meanings that

were expected for each of the products/services that were retained in the study.

Table 2: Symbolic Meanings That Are Expected to Be Relevant for Each Product/Service Studied

Product/Service	Related symbolic meanings
Desktop computer	Provides me freedom or independence; Provides enjoyment, entertainment, relaxation; Puts me in a better mood; Enables me to build and maintain relationships with a particular person, members of my family, or a social group; Allows me to spend time or share activities with loved ones; Is worth a lot of money; Allows me to contribute to solving problems of the society.
TV set	Provides me freedom or independence; Provides enjoyment, entertainment, relaxation; Puts me in a better mood; is worth a lot of money.
Cellular phone	Provides me freedom or independence; Enables me to build and maintain relationships with a particular person, members of my family, or a social group; Allows me to spend time or share activities with loved ones; Allows me to express who I am (my past, my feelings, my personality; my values, my beliefs, etc.); Expresses what is unique about me; Is worth a lot of money.
House	Provides enjoyment, entertainment, relaxation; Puts me in a better mood; Enables me to build and maintain relationships with a particular person, members of my family, or a social group; Allows me to spend time or share activities with loved ones; Shows to others that you need to put a lot of hard work and time to acquire or maintain this product; Represents my skills and achievements; Is worth a lot of money; Has social prestige value. Gives me social status.
Passenger Car	Provides me freedom or independence; Provides enjoyment, entertainment, relaxation; Puts me in a better mood; Enables me to build and maintain relationships with a particular person, members of my family, or a social group; Allows me to spend time or share activities with loved ones; Allows me to express who I am (my past, my feelings, my personality; my values, my beliefs, etc.); Expresses what is unique about me; Shows to others that you need to put a lot of hard work and time to acquire or maintain this product; Represents my skills and achievements; Is worth a lot of money; Has social prestige value. Gives me social status.
Bicycle	Provides me freedom or independence; Provides enjoyment, entertainment, relaxation; Puts me in a better mood; Allows me to contribute to solving problems of the society.
Internet service	Provides me freedom or independence; Provides enjoyment, entertainment, relaxation; Puts me in a better mood; Enables me to build and maintain relationships with a particular person, members of my family, or a social group; Allows me to spend time or share activities with loved ones; Allows me to contribute to solving problems of the society.
Books	Provides me freedom or independence; Provides enjoyment, entertainment, relaxation; Puts me in a better mood; Allows me to express who I am (my past, my feelings, my personality; my values, my beliefs, etc.); Expresses what is unique about me; Allows me to contribute to solving problems of the society.

Table 2 Continued

Credit card	Is worth a lot of money; Has social prestige value. Gives me social status.
MP3 Player	Provides enjoyment, entertainment, relaxation; Provides enjoyment, entertainment, relaxation; Puts me in a better mood; Allows me to express who I am (my past, my feelings, my personality; my values, my beliefs, etc.); Expresses what is unique about me.
Insurance service	Is worth a lot of money; Has social prestige value. Gives me social status.
Vacation	Provides enjoyment, entertainment, relaxation; Puts me in a better mood; Enables me to build and maintain relationships with a particular person, members of my family, or a social group; Allows me to spend time or share activities with loved ones; Shows to others that you need to put a lot of hard work and time to acquire or maintain this product; Represents my skills and achievements; Is worth a lot of money; Has social prestige value. Gives me social status.
Bed	Provides enjoyment, entertainment, relaxation; Puts me in a better mood.
Wine	Provides enjoyment, entertainment, relaxation; Puts me in a better mood.
Jewellery	Allows me to express who I am (my past, my feelings, my personality; my values, my beliefs, etc.); Expresses what is unique about me; Shows to others that you need to put a lot of hard work and time to acquire or maintain this product; Represents my skills and achievements; Is worth a lot of money; Is beautiful and attractive in appearance; Improves my appearance; Has social prestige value. Gives me social status.
Gym service	Provides enjoyment, entertainment, relaxation; Puts me in a better mood; Allows me to express who I am (my past, my feelings, my personality; my values, my beliefs, etc.); Expresses what is unique about me; Is worth a lot of money; Improves my appearance.
Wedding ring	Allows me to express who I am (my past, my feelings, my personality; my values, my beliefs, etc.); Expresses what is unique about me; Is beautiful and attractive in appearance; Improves my appearance.
Coat	Is beautiful and attractive in appearance; Improves my appearance.

4.1 Group Level versus Individual Inferences

It is important to note that the hypotheses of the study are formulated in terms of symbolic meanings. For this reason, a given hypothesis may be tested by considering a statistics across all the products/services that are expected to be related to a symbolic meaning. For example, the hypothesis related to symbolic meanings may be tested by “stacking” the data for the Chinese and the Canadian samples across the products and services listed in Table 3 and then examining whether the difference of the proportions is in fact higher for the Chinese sample as expected in Hypothesis 1 (see also Table 1). This

simply considers *all* those who check a particular adjective to be descriptive of the *whole group* of products/services that are expected to be related to a symbolic meaning. Or, as a more strict test of the hypothesis, one could test if the difference of the proportions is in the expected direction for each of the products (namely, desktop computer, TV set, cellular phone, passenger car, bicycle, internet service, and books). Analysis of “stacked data” for a relevant set of products / services attempts to find whether there is an overall difference between the two groups across the whole set of products and when the interest is not on the individual components that comprise the difference. As far as the goals of this research are concerned, analysis of “stacked data” across all the products/services that are relevant to a symbolic meaning rather than individual comparisons for all products may be regarded as more appropriate for testing each symbolic meaning that was hypothesized. However, from a practitioner’s point of view, individual comparisons for all of the products is more relevant since the differences that may be detected in the perceptions of the consumers from the two cultures may be used in designing different communication messages for these product for these cultures. Furthermore, a test across the relevant products/services is affected just like any other by the increase in sample size when the data are stacked: if there are r products that are included in the test, the sample size for each sub-sample is rn which reduces the pooled standard deviation for the test, increasing the calculated value of the statistic of interest. Therefore, the test statistic becomes sensitive to the number of products/services included in the test and as r increases even very minor differences in the proportions for the Chinese and Canadian samples may be statistically significant. For these reasons, it was decided to test for differences between the two groups computing the test statistic of interest for the whole

group of relevant products using “stacked data”, hereon called “*group test*” and then repeating the test for each individual product separately. Please see Table 2 for the products/services that were regarded to be relevant for a specific symbolic meaning. Tables 3 through 11 present the results of the individual and group tests concerning hypotheses one through eight respectively. The group test for all relevant products for a given symbolic meaning is presented as the last row of each table.

4.2 Multiple Hypothesis Testing

The decision to conduct both the group and the individual hypotheses obviously increases the number of hypotheses to be tested and confronts us with what is known in the statistics literature as the “multiplicity problem” (Westfall, et.al. 1999) or “multiple hypothesis testing problem”. Stated briefly, the problem is that when multiple tests, say $k=20$ tests, are performed with α as the significance level (say, 0.05) for each, at least one of them may turn out to be statistically significant when in fact all null hypotheses are true. As the number of hypotheses increases, the probability of finding statistically significant differences increases although the null hypothesis of no difference is actually true.

Whether to adjust statistical tests for the multiplicity problem is a controversial issue. There is a line of thinking that argues not to make any adjustments (Saville 1990, Rothman 1990, Cook and Farewell 1996). However, there is an extensive literature on why multiplicity adjustments are useful and allows “...reviewers of scientific manuscripts to separate facts from Type I errors” (Westfall et al. 1999, p. 10). For this reason, it was decided to use a multiplicity adjustment in our research to reduce the error

rate for the each family of hypothesis tests that are presented in Tables 3 and 11.

As the thorough review of the literature by Westfall et al. (1999) reveals, there are many different adjustments methods for multiplicity depending on distributional assumptions, correlations among the tested variables, whether confidence intervals are constructed or whether directional test are used, etc. For example, if k hypotheses are being tested, the Bonferroni adjustment procedure reject any null hypothesis whose corresponding p -value, p_j , is less than or equal to α/k . So, if $k=10$ hypotheses are being tested and the desired level of significance is $\alpha = 0.05$, any hypothesis with p -value less than $0.05/10=0.005$ is rejected. The adjustment suggested by Sidak (see Westfall et al. 1999, p. 23) rejects an individual hypothesis out of k hypotheses if the corresponding p -value is less than $1 - (1 - \alpha)^{1/k}$. Westfall et al. (1999) discuss many other adjustments including subsequent revisions of the Bonferroni and Sidak adjustments using sequential adjustments. As a result of their review, they conclude that the adjustments that account for correlations in the data are not dramatically different from simple Bonferroni adjustments although they strongly argue for methods that do take correlations into account (Westfall et al. 1999, p. 241). For discrete distributions, however, they underline that "... incorporating correlations does lead to dramatic differences from the Bonferroni method."(p. 241). For this purpose, they recommend a resampling based adjustment that samples a large number of times from the original data to compute the statistics of interest.

The resampling method that adjusts the p -values for multiple hypothesis tests for binary data is available as a SAS procedure, MULTTEST, which was used for data analysis in this research. The default value for resampling, which is 20000, was increased

to 50000 to reflect better the correlations of the binary vectors.

4.3 Findings

Tables 3 through 11 present the results of the individual and group level tests concerning hypotheses one through eight respectively. Each table displays the proportion of Chinese and Canadian samples that ascribe the mentioned symbolic meanings to a selected set of products/services. The adjusted p -value presented on the second column from the right is a significance level that is adjusted for multiplicity. The column to its left presents the p -value without the multiplicity adjustment. The last column on the right indicates whether the observed difference in the sample proportions is statistically significant and whether it confirms the related hypothesis or not.

An examination of the last rows of Tables 3 through 11 shows that all eight hypotheses of the study are confirmed and the symbolic meanings ascribed by the Canadian and Chinese samples differ in the expected direction as summarized in Table 1. More specifically, more Chinese ascribe utilitarian, interpersonal tie related, financial, and status related symbolic meanings with the selected sample of products whereas more Canadians ascribe enjoyment, self identity, appearance related, and social responsibility related symbolic meanings with the selected sample of products and services. While the differences in proportions are practically very small for symbolic meanings associated with financial value (0.010), interpersonal ties (0.024), and utilitarian symbolic meanings (0.037), they are much higher for the remaining symbolic meanings associated with enjoyment (0.114), self expression (0.105), self achievement (0.057), appearance (0.236), status (0.101), and social responsibility (0.197). It should also be underlined again, as

discussed in detail above, stacking the data for group level test (across all products/services that are relevant for a symbolic meaning) increases the total sample size making it easier to find statistically significant differences between the two groups. For this reason, an examination of the magnitude of the differences in proportions is meaningful to judge if the computed difference is likely to be practically significant.

For this reason, despite these rather positive results confirming the hypotheses of the study, one needs to be cautious about the results. Therefore, it is instructive to examine the hypothesis test for each individual product for each symbolic meaning. The discussion in the following section focuses on p-values that are adjusted for multiplicity problem as explained before.

4.3.1 Utilitarian Symbolic Meanings⁷

To test the first hypothesis concerning Utilitarian symbolic meaning, we choose seven products/services: desktop computer, TV set, cellular phone, passenger car, bicycle, internet service, and books. The symbolic meaning we used for this test is: “provides me freedom or independence”.

Generally speaking, this hypothesis is somewhat supported. The Chinese sample ascribes more utilitarian meanings than Canadian sample to more of the selected sample of products and services. In total, we have seven tests. When the adjusted p-values are examined, we find out that, out of those seven tests three of them support our hypothesis

⁷ To be consistent with Richins' study (1994), utilitarian meanings studied were “allows me to be efficient in my daily life or work”, “has a lot of practical usefulness”, and “provides me freedom or independence”. Our pilot studies suggested that “allows me to be efficient in my daily life or work” and “has a lot of practical usefulness” had different meanings across our Chinese sample. So they were eventually dropped from study. Therefore, what we call utilitarian meanings is basically “provides me freedom or independence” in our study.

that more Chinese ascribe utilitarian meanings to the selected sample of products, 2 involve differences of proportions in the expected direction but not of statistically significant, and two tests do not support our hypothesis. These two related tests are: “cell phone-provides me freedom or independence”, and “car-provides me freedom or independence”.

A possible explanation for the failure of the data to support the utilitarian symbolic meanings for Chinese with regard to car is the lower rate of ownership of these products by the studied samples in China versus Canada: some of the Chinese respondent may not have thought of the utilitarian values of these product that they do not own in comparison to their Canadian counterparts.

Providing a similar explanation for cellular phones, however, is not easy. Although the average income in China is much lower that that of Canada, ownership of cellular phones is not much different: data from Ministry of Information Industry of the People’s Republic of China and National Bureau of Statistics of China, and Statistics Canada indicate that 35.30% of the Chinese and 47.51% of the Canadians have cellular phones as of 2006. A possible explanation is for the Chinese the status or prestige associated with the cellular phone may be stronger than the Canadian as one of the main reasons for owning the cellular phone. Also, peer pressure may play a greater role in China than in Canada because of the collectivist values the Chinese society in general.

Table 3: Test of Hypothesis involving Utilitarian Symbolic Meanings

Product/service	Symbolic meanings	Chinese proportion	Canadian proportion	Difference	pooled standard deviation	z-value	p-value	Adjusted p-value ²	Hypothesis confirmed or not *
Desktop computer	freedom or independence ¹	0.370	0.276	0.093	0.057	1.1646	0.050	0.3969	NS,+
TV set	Same as above	0.144	0.073	0.071	0.037	1.892	0.034	0.3023	NS,+
Cellular phone	Same as above	0.233	0.407	-0.174	0.056	-3.077	0.999	1.000	S,-
Passenger car	Same as above	0.349	0.545	-0.195	0.060	-3.269	0.999	1.000	S,-
Bicycle	Same as above	0.411	0.244	0.167	0.056	2.973	0.002	0.028	S,+
Internet service	Same as above	0.589	0.447	0.142	0.061	2.343	0.010	0.105	S,+
Books	Same as above	0.288	0.130	0.158	0.048	3.269	0.001	0.013	S,+
Group Test (All of the Products Above)		0.341	0.303	0.037	0.005	7.551	0.000		S,+

¹ the full phrase is: "Provides me freedom or independence."

² $\alpha=0.10$ is used to test for statistical significance.

* S, + means statistically significant, hypothesis is supported; * S,- means statistically significant, hypothesis is not supported;
 * NS, + means statistically not significant, but in the expected direction; * NS,- means statistically not significant, and not in the expected direction

4.3.2 Symbolic Meanings Associated with Enjoyment

Table 4 presents the results of the study regarding the symbolic meanings associated with enjoyment. To test this hypothesis we selected 12 products/services: desktop computer, TV set, house, passenger car, bicycle, internet service, books, MP3 player, vacation, bed, wine, and fitness/gym service. The symbolic meanings we used for this test are: “provides enjoyment, entertainment, relaxation” and “improves my mood”.

The findings in somewhat support the hypothesis that Canadians attribute more enjoyment related symbolic meanings to the sample of products than the Chinese. Of the 24 tests that were conducted, seven confirm the hypothesis, 13 involve differences of proportions in the expected direction but not of statistical significance, and four tests involve significant results in the opposite direction where the Chinese subjects attribute more enjoyment than the Canadians to desktop computer and passenger car. As in the hypothesis regarding the utilitarian symbolic meanings, the difference in the proportions is in the unexpected direction with regard to the enjoyment derived from using these products. Apparently, the respondents in the Canadian sample consider cars more in terms of utility than in terms of pure enjoyment value in comparison to their Chinese counterparts.

Table 4: Test of Hypothesis Involving Symbolic Meanings Associated With Enjoyment

Product/service	Symbolic meanings	Chinese proportion	Canadian proportion	Difference	pooled standard deviation	z-value	p-value	Adjusted p-value ³	Hypothesis confirmed or not *
Desktop computer	Enjoyment ¹	0.562	0.626	-0.064	0.060	-1.074	0.143	0.687	NS,+
Desktop computer	Mood ²	0.493	0.390	0.103	0.060	1.704	0.954	0.997	S,-
TV set	Enjoyment ¹	0.760	0.780	-0.020	0.051	-0.393	0.348	0.844	NS,+
TV set	Mood ²	0.534	0.577	-0.043	0.061	-0.708	0.240	0.784	NS,+
House	Enjoyment ¹	0.301	0.528	-0.227	0.059	-3.856	<0.001	0.001	S,+
House	Mood ²	0.329	0.423	-0.094	0.059	-1.590	0.056	0.479	NS,+
Passenger car	Enjoyment ¹	0.425	0.276	0.148	0.057	2.581	0.994	0.997	S,-
Passenger car	Mood ²	0.384	0.350	0.034	0.059	0.577	0.717	0.97	S,-
Bicycle	Enjoyment ¹	0.301	0.520	-0.219	0.059	-3.716	<0.001	0.001	S,+
Bicycle	Mood ²	0.233	0.341	-0.109	0.055	-1.966	0.025	0.288	NS,+
Internet service	Enjoyment ¹	0.425	0.569	-0.144	0.061	-2.385	0.009	0.132	NS,+
Internet service	Mood ²	0.288	0.366	-0.078	0.057	-1.363	0.086	0.553	NS,+
Books	Enjoyment ¹	0.610	0.659	-0.049	0.059	-0.832	0.204	0.761	NS,+
Books	Mood ²	0.479	0.512	-0.033	0.061	-0.535	0.297	0.835	NS,+
MP3 player	Enjoyment ¹	0.432	0.594	-0.162	0.060	-2.684	0.004	0.065	S,+
MP3 player	Mood ²	0.473	0.528	-0.056	0.061	-0.914	0.181	0.761	NS,+
Vacation	Enjoyment ¹	0.349	0.829	-0.480	0.052	-9.223	<0.001	<0.001	S,+
Vacation	Mood ²	0.438	0.772	-0.334	0.056	-5.984	<0.001	<0.001	S,+
Bed	Enjoyment ¹	0.534	0.626	-0.092	0.060	-1.528	0.065	0.499	NS,+
Bed	Mood ²	0.418	0.504	-0.086	0.061	-1.418	0.079	0.549	NS,+
Wine	Enjoyment ¹	0.377	0.496	-0.119	0.060	-1.976	0.025	0.288	NS,+

Table 4 Continued

Product/service	Symbolic meanings	Chinese proportion	Canadian proportion	Difference	pooled standard deviation	z-value	p-value	Adjusted p-value ³	Hypothesis confirmed or not *
Wine	Mood ²	0.192	0.569	-0.377	0.055	-6.826	<0.001	<0.001	S,+
Fitness/gym service	Enjoyment ¹	0.753	0.740	0.014	0.053	0.255	0.601	0.956	S,-
Fitness/gym service	Mood ²	0.418	0.675	-0.257	0.059	-4.375	<0.001	<0.001	S,+
Group Test (All of the Products Above)		0.438	0.552	-0.114	0.005	-21.658	1.000		S,+

¹ the full phrase is: "Provides enjoyment, entertainment, relaxation."

² the full phrase is: "Improves my mood."

³ $\alpha=0.10$ is used to test for statistical significance.

* S,+ means statistically significant, hypothesis is supported; * S,- means statistically significant, hypothesis is not supported;

* NS,+ means statistically not significant, but in the expected direction; * NS,- means statistically not significant, and not in the expected direction

4.3.3 Symbolic Meanings Associated With Interpersonal Ties

This hypothesis states that symbolic meanings associated with interpersonal ties are attributed to a sample of products/services more by Chinese than by Canadians. To test hypothesis concerning Interpersonal Ties symbolic meaning, we choose six products/services: desktop computer, cellular phone, house, passenger car, internet service, and vacation. The symbolic meanings we used for this test are: “Reminds me of my relationship with a particular person, reminds me of my family.” and “Allows me to spend time with others or share activities with them”.

Although this hypothesis is supported at the average level with a difference of proportions of 0.024, the difference does not seem to be practically important. As Table 5 summarizes, twelve individual hypotheses were tested with regard to symbolic meanings involving interpersonal ties. Only one is supported. In six tests, the difference in the proportions was in the expected direction, but not significant. In five other tests, the differences were not in the expected direction and they were significant. In the three tests involving desktop computers, cellular phones, and houses, contrary to expectations, more Canadians than Chinese perceived symbolic values associated with the facilitation of interpersonal ties. Although the higher Canadian proportion for computers may be attributed to the larger base of computer ownership in Canada, we can not offer any plausible explanations for the two other significant results, namely cellular phones and houses.

Table 5: Test of Hypothesis Involving Symbolic Meanings Associated with Interpersonal Ties

Product/service	Symbolic meanings	Chinese proportion	Canadian proportion	Difference	pooled standard deviation	z-value	p-value	Adjusted p-value ³	Hypothesis confirmed or not *
Desktop computer	relationship with others ¹	0.315	0.455	-0.140	0.059	-2.372	0.991	1.000	S,-
Desktop computer	time and activities ²	0.219	0.228	-0.008	0.051	-0.166	0.566	0.937	S,-
Cellular phone	relationship with others ¹	0.651	0.650	0.000	0.058	0.005	0.498	0.922	S,-
Cellular phone	time and activities ²	0.158	0.252	-0.094	0.049	-1.912	0.973	1.000	S,-
House	relationship with others ¹	0.315	0.260	0.055	0.055	0.995	0.162	0.659	NS,+
House	time and activities ²	0.404	0.545	-0.141	0.061	-2.322	0.989	1.000	S,-
Passenger car	relationship with others ¹	0.260	0.187	0.073	0.051	1.450	0.077	0.437	NS,+
Passenger car	time and activities ²	0.425	0.293	0.132	0.058	2.278	0.013	0.120	NS,+
Internet service	relationship with others ¹	0.849	0.707	0.142	0.051	2.807	0.002	0.029	S,+
Internet service	time and activities ²	0.534	0.431	0.103	0.061	1.700	0.046	0.324	NS,+

Table 5 Continued

Product/service	Symbolic meanings	Chinese proportion	Canadian proportion	Difference	pooled standard deviation	z-value	p-value	Adjusted p-value ³	Hypothesis confirmed or not *
Vacation	relationship with others ¹	0.637	0.504	0.133	0.060	2.210	0.014	0.120	NS,+
Vacation	time and activities ²	0.774	0.740	0.034	0.053	0.649	0.258	0.772	NS,+
Group Test (All of the Products Above)		0.462	0.438	0.024	0.005	4.558	0.000		S,+

¹ the full phrase is: "Reminds me of my relationship with a particular person, reminds me of my family."

² the full phrase is: "Allows me to spend time with others or share activities with them."

³ $\alpha=0.10$ is used to test for statistical significance.

* S,+ means statistically significant, hypothesis is supported;

* S,- means statistically significant, hypothesis is not supported;

* NS,+ means statistically not significant, but in the expected direction

* NS,- means statistically not significant, and not in the expected direction

4.3.4 Symbolic Meanings Associated with Self Expression

Tables 6 summarizes the results of the individual and group level tests for the fourth hypothesis of the study which posits that symbolic meanings associated with self expression is attributed to a sample of product and services by more Canadians than Chinese. To test hypothesis concerning Identity, we divided our findings into two segments: Self Expression and Self Achievement, since these two sub-dimensions are expected to be associated with different products/services. For symbolic meaning involving self expression, we choose seven products/services: desktop computer, cellular phone, passenger car, books, MP3 player, jewellery, fitness/gym service, and wedding ring. The symbolic meanings we used for this test are: “Allows me to express myself” and “Expresses what is unique about me”.

The group test of this hypothesis across 14 items confirms the hypothesis with a difference of 0.105 in favour of the Canadian sample. Six of the 14 individual tests confirm the hypothesis. Only one test is not significant. It is in the opposite direction with a larger percentage for cellular phones. Seven of the individual tests were not significant but the difference in the sample proportions were in the expected direction, with higher values for the Canadian sample. Overall, self expressive symbolic meanings were ascribed to a sample of products/services by more Canadians than Chinese.

Table 6: Test of Hypothesis Involving Symbolic Meanings Associated With Self Expression

Product/service	Symbolic meanings	Chinese proportion	Canadian proportion	Difference	pooled standard deviation	z-value	p-value	Adjusted p-value ³	Hypothesis confirmed or not *
Cellular phone	Express myself ¹	0.288	0.195	0.093	0.052	1.788	0.960	0.973	S,-
Cellular phone	Unique ²	0.233	0.325	-0.092	0.055	-1.683	0.046	0.248	NS,+
Passenger car	Express myself ¹	0.178	0.211	-0.033	0.049	-0.686	0.246	0.602	NS,+
Passenger car	Unique ²	0.308	0.358	-0.050	0.058	-0.858	0.195	0.602	NS,+
Books	Express myself ¹	0.370	0.423	-0.053	0.06	-0.884	0.189	0.602	NS,+
Books	Unique ²	0.322	0.423	-0.101	0.059	-1.710	0.044	0.248	NS,+
MP3 player	Express myself ¹	0.164	0.293	-0.128	0.051	-2.505	0.006	0.057	S,+
MP3 player	Unique ²	0.171	0.390	-0.219	0.054	-4.062	<0.001	<0.001	S,+
Jewellery	Express myself ¹	0.130	0.398	-0.268	0.052	-5.140	<0.001	<0.001	S,+
Jewellery	Unique ²	0.137	0.504	-0.367	0.053	-6.886	<0.001	<0.001	S,+
Fitness/gym service	Express myself ¹	0.240	0.398	-0.159	0.057	-2.806	0.003	0.030	S,+
Fitness/gym service	Unique ²	0.253	0.293	-0.039	0.055	-0.719	0.236	0.602	NS,+
Wedding ring	Express myself ¹	0.205	0.333	-0.128	0.054	-2.364	0.009	0.083	S,+
Wedding ring	Unique ²	0.267	0.366	-0.099	0.057	-1.738	0.042	0.248	NS,+
Group Test (All of the Products Above)		0.249	0.354	-0.105	0.005	-21.577	1.000		S,+

¹ the full phrase is: "Allows me to express myself."

² the full phrase is: "Expresses what is unique about me."

³ $\alpha=0.10$ is used to test for statistical significance.

* S,+ means statistically significant, hypothesis is supported; * S,- means statistically significant, hypothesis is not supported;

* NS,+ means statistically not significant, but in the expected direction, * NS,- means statistically not significant, and not in the expected direction

4.3.5 Symbolic Meanings Associated with Self Achievement

To test the hypothesis concerning symbolic meaning associated with self achievement, we choose 4 products/services: house, passenger car, vacation, and jewellery. The symbolic meanings we used for this test are: “Requires a lot of effort to acquire and maintain.” and “Represents my skills and achievement”.

As presented in Table 7, the group test for symbolic meanings associated with self achievement confirms the expectation that such meanings are attributed to products more by the Canadians than by the Chinese with a difference of only 0.057 in the proportions. At the individual test level, however, support for the hypothesis is not as clear: of the eight tests conducted, only two tests confirm the hypothesis with significant adjusted p -values. Two other significant results are in an unexpected direction involving higher proportions for passenger cars and jewellery for the Chinese sample. The remaining four tests involve statistically nonsignificant differences in proportions in the expected direction. Therefore, the hypothesis regarding self achievement is not well supported.

It is tempting to offer an explanation based on the difference in average income levels between China and Canada for the higher proportions for the Chinese sample for passenger car and jewellery. Furthermore, we could argue that it may be more difficult for the Chinese to purchase these items, and therefore, these products may be regarded as symbols of achievement in China. However, similar arguments can easily be made for a house and a vacation package for which the proportions are lower for the Chinese sample as presented in Table 7. Therefore, income level as a rival explanation does not seem to be a valid argument.

Table 7: Test of Hypothesis Involving Symbolic Meanings Associated With Self Achievement

Product/service	Symbolic meanings	Chinese proportion	Canadian proportion	Difference	pooled standard deviation	z-value	p-value	Adjusted p-value ³	Hypothesis confirmed or not *
House	Effort ¹	0.425	0.512	-0.088	0.061	-1.438	0.067	0.340	NS,+
House	Skills & Achiv ₂	0.192	0.439	-0.247	0.055	-4.467	<0.001	<0.001	S,+
Passenger car	Effort ¹	0.363	0.377	-0.100	0.060	-1.672	0.407	0.803	NS,+
Passenger car	Skills & Achiv ₂	0.336	0.203	0.132	0.053	2.482	0.991	0.999	S,-
Vacation	Effort ¹	0.384	0.463	-0.080	0.060	-1.323	0.084	0.346	NS,+
Vacation	Skills & Achiv ₂	0.219	0.358	-0.139	0.055	-2.513	0.005	0.035	S,+
Jewellery	Effort ¹	0.267	0.293	-0.026	0.055	-0.465	0.306	0.744	NS,+
Jewellery	Skills & Achiv ₂	0.240	0.146	0.093	0.048	1.963	0.970	0.999	S,-
Group Test (All of the Products Above)		0.303	0.360	-0.057	0.005	-11.305	1.000		S,+

¹ the full phrase is: "Requires a lot of effort to acquire and maintain."

² the full phrase is: "Represents my skills and achievements."

³ $\alpha=0.10$ is used to test for statistical significance.

* S,+ means statistically significant, hypothesis is supported; * S,- means statistically significant, hypothesis is not supported;

* NS,+ means statistically not significant, but in the expected direction, * NS,- means statistically not significant, and not in the expected direction

4.3.6 Symbolic Meanings Associated with Financial Value

To test the hypothesis concerning symbolic meaning associated with financial value, we choose five products/services: house, passenger car, insurance service, vacation, and jewellery. The symbolic meaning we used for this test is: “Is valuable in terms of money.”

Although this hypothesis is supported at the average level with a slight difference of proportions of 0.01, the differences does not seem to be practically important. Moreover, the hypothesis that symbolic meanings associated with financial value will be attributed to a sample of products and services more by Chinese than by Canadians is not supported at the individual test level. Only one of five individual tests confirms the hypothesis. The average test across all five items is significant in the expected direction but with a difference of 0.01 for the Chinese proportion higher than the Canadian proportion. Two of the five individual tests are significant in favour of the Canadian sample. These findings are rather surprising and difficult to explain in terms of rival hypotheses.

Table 8: Test of Hypothesis Involving Symbolic Meanings Associated With Financial Value

Product/service	Symbolic meanings	Chinese proportion	Canadian proportion	Difference	pooled standard deviation	z-value	p-value	Adjusted p-value ¹	Hypothesis confirmed or not *
House	Is valuable in terms of money	0.527	0.642	-0.115	0.060	-1.921	0.971	0.998	S,-
Passenger car	Same as above	0.301	0.285	0.017	0.056	0.302	0.381	0.918	NS,+
Insurance service	Same as above	0.589	0.236	0.353	0.056	6.322	<0.001	<0.001	S,+
Vacation	Same as above	0.445	0.455	-0.010	0.061	-0.166	0.566	0.953	NS,-
jewellery	Same as above	0.342	0.537	-0.194	0.060	-3.252	0.999	1.000	S,-
Group Test (All of the Products Above)		0.441	0.431	0.010	0.005	1.936	0.026		S,+

¹ $\alpha=0.10$ is used to test for statistical significance.

* S,+ means statistically significant, hypothesis is supported; * S,- means statistically significant, hypothesis is not supported;

* NS,+ means statistically not significant, but in the expected direction, * NS,- means statistically not significant, and not in the expected direction

4.3.7 Symbolic Meanings Associated With Appearance

Appearance related symbolic meanings were expected to be attributed to a sample of products and services less by Chinese than by Canadians. To test this hypothesis, we choose three products/services: jewellery, fitness/gym service, and wedding ring. The symbolic meanings we used for this test are: “Is beautiful and attractive in appearance.” and “Improves my appearance”.⁸

As presented in Table 9, this hypothesis is confirmed in the average, and to a certain extent in the individual tests. Three of the five individual tests are statistically significant for jewellery and fitness/gym service with the difference in proportions favouring the Canadian sample. The proportion differences for the two remaining tests are not significant with one of them being in the expected direction.

⁸ Fitness/gym service was not included in testing “Is beautiful and attractive in appearance” since the attribute is not relevant for the service.

Table 9: Test of Hypothesis Involving Symbolic Meanings Associated With Appearance

Product/service	Symbolic meanings	Chinese proportion	Canadian proportion	Difference	pooled standard deviation	z-value	p-value	Adjusted p-value ³	Hypothesis confirmed or not *
Jewellery	Appearance ¹	0.315	0.691	-0.376	0.057	-6.632	<0.001	<0.001	S,+
Jewellery	My appearance ²	0.164	0.610	-0.445	0.054	-8.306	<0.001	<0.001	S,+
Fitness/gym service	My appearance ²	0.233	0.512	-0.279	0.057	-4.896	<0.001	<0.001	S,+
Wedding ring	Appearance ¹	0.425	0.512	-0.088	0.061	-1.438	0.076	0.255	NS,+
Wedding ring	My appearance ²	0.342	0.333	0.009	0.058	0.158	0.563	0.890	NS,-
Group Test (All of the Products Above)		0.296	0.532	-0.236	0.005	-46.043	1.000		S,+

¹ the full phrase is: "Is beautiful and attractive in appearance."

² the full phrase is: "improves my appearance."

³ $\alpha=0.10$ is used to test for statistical significance.

* S,+ means statistically significant, hypothesis is supported; * S,- means statistically significant, hypothesis is not supported;

* NS,+ means statistically not significant, but in the expected direction, * NS,- means statistically not significant, and not in the expected direction

4.3.8 Symbolic Meanings Associated With Status

Symbolic meanings associated with status were hypothesized to be attributed to a sample of products/services more by Chinese than by Canadians. To test hypothesis we choose six products/services: house, passenger car, credit card, insurance service, vacation, and jewellery. The symbolic meaning we used for this test is: “Has social prestige value, gives me social status.”

Table 10 reports the related results. As presented therein, this hypothesis is supported both at the average and the individual test levels. In general, a higher proportion of Chinese ascribe status meanings to the selected sample of products/services. Four out of six individual tests confirm the hypothesis (passenger car, credit card, insurance service, and vacation) with only one other test (jewellery) with significant results in favour of the Canadian sample. Overall, a larger percentage of the Chinese sample consider passenger cars, credit cards, insurance service, and vacation packages as having social prestige value and giving the person social status.

Table 10: Test of Hypotheses Involving Symbolic Meanings Associated With Status

Product/service	Symbolic meanings	Chinese proportion	Canadian proportion	Difference	pooled standard deviation	z-value	p-value	Adjusted p-value ²	Hypothesis confirmed or not *
House	Prestige status ¹	0.452	0.374	0.078	0.060	1.301	0.098	0.197	NS,+
Passenger car	Prestige status ¹	0.671	0.374	0.297	0.058	5.087	<0.001	<0.001	S,+
Credit card	Prestige status ¹	0.568	0.398	0.170	0.060	2.824	0.003	0.015	S,+
Insurance service	Prestige status ¹	0.253	0.114	0.140	0.046	3.035	0.002	0.009	S,+
Vacation	Prestige status ¹	0.466	0.341	0.124	0.059	2.091	0.020	0.056	S,+
Jewellery	Prestige status ¹	0.185	0.390	-0.205	0.054	-3.769	1.000	1.000	S,-
Group Test (All of the Products Above)		0.433	0.332	0.101	0.005	19.677	0.000		S,+

¹ the full phrase is: "Has social prestige value. Gives me social status."

² $\alpha=0.10$ is used to test for statistical significance.

* S,+ means statistically significant, hypothesis is supported; * S,- means statistically significant, hypothesis is not supported;

* NS,+ means statistically not significant, but in the expected direction, * NS,- means statistically not significant, and not in the expected direction

4.3.9 Symbolic Meanings Associated With Social Responsibility

Symbolic meanings associated with social responsibility were expected to be ascribed to a sample of products/services less by Chinese than by Canadians. To test this hypothesis, we choose five products/services: desktop computer, bicycle, internet service, organic food, and books. The symbolic meaning we used for this test is “Allows me to contribute to solving societal problems”.

The results that are presented in Table 11 confirm this hypothesis rather strongly for desktop computer, bicycle, internet service, organic food, and books at the individual product level and also at the average level. As expected a larger percentage of Canadian sample than the Chinese sample (about 19.7%) consider the selected sample of products as allowing them to contribute to solving social problems.

Table 11: Test of Hypotheses Involving Symbolic Meanings Associated With Social Responsibility

Product/service	Symbolic meanings	Chinese proportion	Canadian proportion	Difference	pooled standard deviation	z-value	p-value	Adjusted p-value ²	Hypothesis confirmed or not *
Desktop computer	Solving societal problems ¹	0.329	0.602	-0.273	0.059	-4.639	<0.001	<0.001	S,+
Bicycle	Solving societal problems ¹	0.158	0.285	-0.127	0.051	-2.508	0.006	0.012	S,+
Internet service	Solving societal problems ¹	0.233	0.512	-0.279	0.057	-4.896	<0.001	<0.001	S,+
Organic food	Solving societal problems ¹	0.315	0.472	-0.156	0.059	-2.643	0.004	0.012	S,+
Books	Solving societal problems ¹	0.233	0.382	-0.149	0.056	-2.662	0.004	0.012	S,+
Group Test (All of the Products Above)		0.253	0.450	-0.197	0.005	39.210	1.000		S,+

¹ the full phrase is: "Allows me to contribute to solving societal problems."

² $\alpha=0.10$ is used to test for statistical significance.

* S,+ means statistically significant, hypothesis is supported; * S,- means statistically significant, hypothesis is not supported;

* NS,+ means statistically not significant, but in the expected direction, * NS,- means statistically not significant, and not in the expected direction

4.3.10 Summary of Findings

As presented in Tables 3 through 11, each hypothesis of the study that appears in Table 1 was tested with respect to a sample of products/services that varied across the types of symbolic meanings. The tests were conducted at the average level across the relevant sample of products/services and also at the individual product/service level. An examination of the last rows of Tables 3 through 11 shows that all eight hypotheses of the study are confirmed and the symbolic meanings ascribed by the Canadian and Chinese samples differ in the expected direction as summarized in Table 1. More Chinese respondents ascribe utilitarian, interpersonal tie related, financial, and status related symbolic meanings with the selected sample of products whereas more Canadians ascribe enjoyment, self identity, appearance related, and social responsibility related symbolic meanings with the selected sample of products and services. However, the differences in proportions are practically very small for symbolic meanings associated with financial value (1.0%), interpersonal ties (2.4%), and utilitarian symbolic meanings (3.7%). The differences are much higher for the remaining symbolic meanings associated with enjoyment (11.4%), self expression (10.5%), self achievement (5.7%), appearance (23.6%), status (10.1%), and social responsibility (19.7%). At the individual product/service level, relatively stronger support is observed with regard to symbolic meanings associated with enjoyment, self expression, self achievement, appearance, status, and social responsibility. It is interesting to note that all of these symbolic meanings with the exception of status are the meanings that were expected to be ascribed to products and services more by the Canadian than by the Chinese sample.

4.4 Discussion

Meanings are part of our human culture. People use meanings to describe all kinds of objects and sometimes to express themselves and their points of view (Kleine, Kleine, and Allen 1995; Belk 1988). In marketing research, symbolic meanings of products/services are meanings we use to express our feelings and perceptions about products/services. Symbolic meanings may differ across people, products and services, time, physical/cultural environment, or any other context. This thesis sought to explore the influence that culture may have on the formation and communication of symbolic meanings.

Our findings confirm that culture may influence the symbolic meanings that may be ascribed to a common set of products and services. Culture is a filter through which we interpret our physical and social environment (McCracken, 1986). However, the impact of cultural differences on the perceptions of symbolic meanings has not been properly recognized with the exception of researchers such as (Ger et al 1999, Mehta and Belk 1991; Penaloza 1994) who reported the pioneering studies in this area. Studies such as theirs and the current one will enhance our understanding of consumer behaviour not only in western economies but also in the emerging markets around the world.

Our findings also suggest that symbolic meanings may be important reasons for product choice when consumers make purchase decisions. This line of research clearly shows that consumers purchase products/services not only for the basic utilitarian characteristics but also for different symbolic meanings they transfer from certain products/services to themselves. This meaning transfer process will actually enable the consumer meet needs other than utilitarian needs and simple problem solving

With the rapid economic development around the world and the globalization of international business, cultural differences among different nations may become less pronounced over time. Especially for some globally popular products/services, the differences in the perceptions of two cultural groups may not be very significant. For example, in our tests, many of the differences in proportion of participants who report these perceptions on symbolic meanings between Chinese and Canadian students are below 10%. A possible reason for this is the common advertising and communication programs that are being used around the globe by multinational companies which are promoting the same products/services using the same strategies across different countries. Despite this trend, however, there still seems to be a room for international marketers to recognize the differences in cultural values across societies and build their communication programs such that they take into account the symbolic meanings that may be more prevalent in a society for the product / service they are marketing.

4.5 Limitations and Future Research

Just like many other empirical studies in the social sciences, this study too has some limitations. On the conceptual side, one of the key limitations is that the symbolic meanings were used with respect to product/services that the respondents may or may not currently own. However, the typology of symbolic meanings that was suggested by Richins (1994) and used as a framework for this study was intended for possessions which are owned, used, experienced and possibly cared for and created memories with over long period of time. This difference may be significant in the sense that with possessions, the consumer has more experience with the product and if the product has

been owned for a long time, emotional ties may be built with it. Potential lack of experience, income level with respect to the budget effect of the purchase of the item, education level to be able to appreciate what the product can do, etc. become important considerations in the formation of the symbolic meanings of products that are not yet owned. For this reason, the conceptualization of symbolic meanings for possessions versus products / services in general should be scrutinized further in future research.

A further limitation is associated with data analysis. Although the reported *p*-values were adjusted for individual products/services, *p*-values related to each symbolic meaning at the group level involving all selected products/services were not adjusted. Furthermore, these tests at the group level involve “stacked data” increasing the sample size for each group in direct relation to the number of product/service items included in the test, in turn reducing the pooled standard deviations that are used in the tests. Therefore, it becomes easier to reject the null hypothesis of no group differences with increasing sample size. Therefore, group level differences should be interpreted with this limitation in mind by paying more attention to the magnitude of the reported differences in proportions rather than only the associated *p*-values.

As our research shows and as it is expected, symbolic meanings are idiosyncratic to products / services. Testing hypotheses of the type that were presented in this research require a sample of product/services that may be relevant to a particular symbolic meaning. The list of products provided here (and also discussed in prior research such as the one by Richins (1994)) only constitute an initial list that needs to be refined further.

Our pilot studies suggested that the list of symbolic meanings that we included in our study could be extended since some subjects suggested some interesting meanings (such

as “social responsibility”) that have not been popular in the literature before but rather timely at this time. Further research is needed along the lines reported by Richins (1994) to identify a richer set of symbolic meanings that may be relevant in cross cultural contexts for a wide spectrum of products and services.

The use of university student samples may have introduced some bias in our findings and reduced the differences in the samples that may exist when older generations of consumers are compared in China and Canada. These respondents are well educated and they are exposed to internet and international media. Therefore, their perceptions of certain products may have been affected in similar ways to reduce any differences that may have existed. A study with non-student samples may prove to confirm the hypotheses of the current study more strongly.

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Appendix A

A SURVEY OF CONSUMERS' REASONS FOR VALUING CERTAIN PRODUCTS AND SERVICES

Thank you for participating in this survey.

This is an academic study on consumers' reasons for valuing certain products and services. It is being conducted by a professor and a graduate student in the Department of Marketing, John Molson School of Business, Concordia University. The study has no commercial purposes.

Please be assured that your responses will be kept strictly confidential. They will not be singled out but will be used in group averages only. The data collected may be used in academic publications.

Participation in this survey is voluntary and you are free to discontinue at any time.

SECTION 1: INSTRUCTIONS

Research in consumer behavior suggests that consumers may value products and services for various reasons. For example, a high quality pen may be valued because it makes the owner look professional and therefore improves his social status. It may be valued also because the writing does not smudge, and therefore the product has practical usefulness for the owner. .

On the following pages, you will be given a list of various **types of reasons** for valuing products and services. You will also be given a sample of **products and services**. Please read each reason carefully and put an **X** in the cell that corresponds to the reason and product or service that you consider. For example, the two reasons for valuing a high quality pen would be indicated in the remaining part of this survey as follows:

Reason for Valuing a Product or Service	Product and Services			
	High Quality Pen	Product X	Service X	Product Y
Improves my social status	X			
Has practical usefulness	X			

SECTION 2: SURVEY

Please note that the table on the next page presents various reasons for valuing products in the first column on the left. The remaining columns of the table list various products and services. Please read each reason, and then carefully consider if that reason applies to each of the listed products on the right. Note that whether a stated reason applies to a particular product or service is entirely personal and may vary from one person to another. We are interested in how you feel. So, feel free to express your opinions. If you think that a stated reason applies to a product or service, **put an X mark in the cell** that corresponds to that reason and the mentioned product or service.

Reason for Valuing a Product or Service	Product and Services				
	Desktop Computer	TV set	Cellular phone	House	Passenger Car
Allows me to be efficient in my daily life or work.					
Provides me freedom or independence.					
Provides enjoyment, entertainment, or relaxation					
Puts me in a better mood.					
Enables me to build and maintain relationships with a particular person, members of my family, or a social group.					
Allows me to spend time or share activities with loved ones.					
Allows me to express who I am (my past, my feelings, my personality, my values, my beliefs, etc.)					
Expresses what is unique about me.					
Shows to others that you need to put a lot of hard work and time to acquire or maintain this product.					
Represents my skills or my achievements.					
Is worth a lot of money.					
Is beautiful and attractive in appearance.					
Improves my appearance.					
Has social prestige value. Gives me social status.					
Because of using this product or service others think well of me.					
Allows me to contribute to solving problems of the society.					
Helps to improve skills or abilities for myself or my family members.					
Provides a spiritual link to divine or higher forces and gives me spiritual peace..					

	Product and Services				
Reason for Valuing a Product or Service	Bicycle	Internet Service	Organic Food	Books	Credit Card
Allows me to be efficient in my daily life or work.					
Provides me freedom or independence.					
Provides enjoyment, entertainment, or relaxation					
Puts me in a better mood.					
Enables me to build and maintain relationships with a particular person, members of my family, or a social group.					
Allows me to spend time or share activities with loved ones.					
Allows me to express who I am (my past, my feelings, my personality, my values, my beliefs, etc.)					
Expresses what is unique about me.					
Shows to others that you need to put a lot of hard work and time to acquire or maintain this product.					
Represents my skills or my achievements.					
Is worth a lot of money.					
Is beautiful and attractive in appearance.					
Improves my appearance.					
Has social prestige value. Gives me social status.					
Because of using this product or service others think well of me.					
Allows me to contribute to solving problems of the society.					
Helps to improve skills or abilities for myself or my family members.					
Provides a spiritual link to divine or higher forces and gives me spiritual peace..					

	Product and Services				
Reason for Valuing a Product or Service	MP3 Player	Insurance Service	Vacation	Bed	Wine
Allows me to be efficient in my daily life or work.					
Provides me freedom or independence.					
Provides enjoyment, entertainment, or relaxation					
Puts me in a better mood.					
Enables me to build and maintain relationships with a particular person, members of my family, or a social group.					
Allows me to spend time or share activities with loved ones.					
Allows me to express who I am (my past, my feelings, my personality, my values, my beliefs, etc.)					
Expresses what is unique about me.					
Shows to others that you need to put a lot of hard work and time to acquire or maintain this product.					
Represents my skills or my achievements.					
Is worth a lot of money.					
Is beautiful and attractive in appearance.					
Improves my appearance.					
Has social prestige value. Gives me social status.					
Because of using this product or service others think well of me.					
Allows me to contribute to solving problems of the society.					
Helps to improve skills or abilities for myself or my family members.					
Provides a spiritual link to divine or higher forces and gives me spiritual peace..					

Reason for Valuing a Product or Service	Product and Services				
	Jewellery	Rocking Chair	Gym Service	Wedding Ring	Coat
Allows me to be efficient in my daily life or work.					
Provides me freedom or independence.					
Provides enjoyment, entertainment, or relaxation					
Puts me in a better mood.					
Enables me to build and maintain relationships with a particular person, members of my family, or a social group.					
Allows me to spend time or share activities with loved ones.					
Allows me to express who I am (my past, my feelings, my personality, my values, my beliefs, etc.)					
Expresses what is unique about me.					
Shows to others that you need to put a lot of hard work and time to acquire or maintain this product.					
Represents my skills or my achievements.					
Is worth a lot of money.					
Is beautiful and attractive in appearance.					
Improves my appearance.					
Has social prestige value. Gives me social status.					
Because of using this product or service others think well of me.					
Allows me to contribute to solving problems of the society.					
Helps to improve skills or abilities for myself or my family members.					
Provides a spiritual link to divine or higher forces and gives me spiritual peace..					

SECTION 3: YOUR BACKGROUND:

In this section, we would like to learn about your background.

Were you born in North America?

Yes:

No:

Do you speak English and / or French fluently?

Yes:

No:

Are you of European ethnic origin?

Yes:

No:

Do you speak mostly in English, French or a European language with your family members and friends?

Yes:

No:

THANK YOU FOR YOUR PARTICIPATION.

Appendix B

消费者衡量产品和服务价值观念的调查

感谢您参与本次调查

本次调查是关于消费者衡量产品和服务价值观念的理论调查,是由加拿大 Concordia 大学 John Molson 商学院的一位教授和研究生进行的。本次调查无任何商业目的。

您的回答将信息会严格保密。数据可能会用于学术发表。

参与本次调查是完全自愿,您可以在任何时候停止。

第一部分:简介

消费者行为学的研究表明产品和服务因为各种不同的原因而被消费者珍视。例如一只高品质的钢笔可能因为它可以让使用者看起来职业一些,显的更有身份而被消费者视为有价值,也可能因为它写字很流利,因而很实用而被消费者视为有价值。

接下来,你会看到一系列消费者衡量产品和服务价值的各种原因,以及一系列的产品和服务。请仔细阅读每个原因,然后在你认为能提供这种价值的相应产品和服务的格子里划“X”。例如衡量一只高质量钢笔的两个原因可能是:

衡量产品和服务价值的原因	产品和服务			
	高品质钢笔	产品 X	服务 X	产品 Y
提高社会地位	X			
实用性	X			

第二部分:问卷调查

在以下的表格中,左边第一竖行是消费者衡量产品和服务价值的各种原因。上面第一行是各种产品和服务的名称。请仔细阅读每一个原因和产品,然后把你所认为的每个产品所代表的价值选出来。请注意每个消费者衡量产品价值的原因多种多样,你可以选择你认为合适的任何原因。请在相应的格子里划“X”。

衡量产品和服务价值的原因	产品和服务				
	台式计算机	电视机	手机	住房	汽车
在日常生活工作中让我有效率					
可以给我独立和自由，不用依靠其他人					
可以给我享受，娱乐，或者放松					
给我一个好心情					
可以使我能够和家人朋友，其他人，或某个社会团体建立或维持良好的关系					
可以使我和家人朋友一起分享时间，一起活动					
允许我可以表达我自己：我是什么样的一个人（我的过去，我的感受，我的个性，我的信念等）					
可以表达关于我自己与众不同的一面					
显示出来如果你要获取或维护这种产品或服务，你得付出辛勤努力，刻苦工作，时间等					
显示出这种产品或服务能代表我的技能或成就					
很有投资，经济上的价值					
产品或服务本身很漂亮或外表，形式很吸引人					
让我本人看起来更好看，更有吸引力					
提高我的社会地位					
通过使用这种产品或服务，让别人想起我的好处，优点					
可以让我在解决社会问题，环境问题上做出自己的贡献					
有助于我自己或我的家庭成员提高个人能力，修养或技能等					
提供我一种精神上，信仰上的支持；使自己感觉和某种神奇的，或非凡的力量联系起来，并带给自己内心的平静。					

衡量产品和服务价值的原因	产品和服务				
	自行车	互联网服务	绿色食品	书籍	信用卡
在日常生活工作中让我有效率					
可以给我独立和自由，不用依靠其他人					
可以给我享受，娱乐，或者放松					
给我一个好心情					
可以使我能够和家人朋友，其他人，或某个社会团体建立或维持良好的关系					
可以使我和家人朋友一起分享时间，一起活动					
允许我可以表达我自己：我是什么样的人（我的过去，我的感受，我的个性，我的信念等）					
可以表达关于我自己与众不同的一面					
显示出来如果你要获取或维护这种产品或服务，你得付出辛勤努力，刻苦工作，时间等					
显示出这种产品或服务能代表我的技能或成就					
很有投资，经济上的价值					
产品或服务本身很漂亮或外表，形式很吸引人					
让我本人看起来更好看，更有吸引力					
提高我的社会地位					
通过使用这种产品或服务，让别人想起我的好处，优点					
可以让我在解决社会问题，环境问题上做出自己的贡献					
有助于我自己或我的家庭成员提高个人能力，修养或技能等					
提供我一种精神上，信仰上的支持；使自己感觉和某种神奇的，或非凡的力量联系起来，并带给自己内心的平静。					

衡量产品和服务价值的原因	产品和服务				
	MP3 播放器	保险	旅游休假	床	酒
在日常生活工作中让我有效率					
可以给我独立和自由，不用依靠其他人					
可以给我享受，娱乐，或者放松					
给我一个好心情					
可以使我能够和家人朋友，其他人，或某个社会团体建立或维持良好的关系					
可以使我和家人朋友一起分享时间，一起活动					
允许我可以表达我自己：我是什么样的人（我的过去，我的感受，我的个性，我的信念等）					
可以表达关于我自己与众不同的一面					
显示出来如果你要获取或维护这种产品或服务，你得付出辛勤努力，刻苦工作，时间等					
显示出这种产品或服务能代表我的技能或成就					
很有投资，经济上的价值					
产品或服务本身很漂亮或外表，形式很吸引人					
让我本人看起来更好看，更有吸引力					
提高我的社会地位					
通过使用这种产品或服务，让别人想起我的好处，优点					
可以让我在解决社会问题，环境问题上做出自己的贡献					
有助于我自己或我的家庭成员提高个人能力，修养或技能等					
提供我一种精神上，信仰上的支持；使自己感觉和某种神奇的，或非凡的力量联系起来，并带给自己内心的平静。					

衡量产品和服务价值的原因	产品和服务				
	珠宝	摇椅	健身服务	结婚戒指	外套
在日常生活工作中让我有效率					
可以给我独立和自由，不用依靠其他人					
可以给我享受，娱乐，或者放松					
给我一个好心情					
可以使我能够和家人朋友，其他人，或某个社会团体建立或维持良好的关系					
可以使我和家人朋友一起分享时间，一起活动					
允许我可以表达我自己：我是什么样的一个人（我的过去，我的感受，我的个性，我的信念等）					
可以表达关于我自己与众不同的一面					
显示出来如果你要获取或维护这种产品或服务，你得付出辛勤努力，刻苦工作，时间等					
显示出这种产品或服务能代表我的技能或成就					
很有投资，经济上的价值					
产品或服务本身很漂亮或外表，形式很吸引人					
让我本人看起来更好看，更有吸引力					
提高我的社会地位					
通过使用这种产品或服务，让别人想起我的好处，优点					
可以让我在解决社会问题，环境问题上做出自己的贡献					
有助于我自己或我的家庭成员提高个人能力，修养或技能等					
提供我一种精神上，信仰上的支持；使自己感觉和某种神奇的，或非凡的力量联系起来，并带给自己内心的平静。					

感谢您参与本次问卷调查！