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Antecedents of Taiwan Chinese Consumers' Purchase Intentions Toward U.S.- and Japanese-Made Household Appliances

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ABSTRACT. The purpose of this article is to understand the factors influencing Taiwan's Chinese consumers' purchase intentions toward U.S. and Japanese household appliances. The authors attempt to develop and test a comprehensive model linking such purchase intentions to several constructs including Taiwan Chinese consumers' openness to foreign cultures, consumer nationalism, product familiarity, traditional cultural values orientation, and product-country image. The result of analysis using structural equation modeling shows that consumer nationalism has a strong indirect effect on purchase intention via the product-country image construct. Taiwan Chinese consumers' traditional cultural values orientation and openness to foreign cultures have direct effects on consumer nationalism and, hence, are important antecedents in explaining the purchase intentions toward foreign-made goods by Taiwan Chinese consumers. With the growing importance of the Chinese domestic market, this study provides international marketing managers with practical implications in important areas such as market segmentation, branding strategy, and market research and practices in the Chinese consumer market.

KEYWORDS. Openness to foreign cultures, consumer nationalism, product familiarity, traditional cultural value orientation, product-country image, Taiwan Chinese consumers, purchase intention

INTRODUCTION

Taiwan, one of the four "Asian Tigers," has achieved an impressive record of economic

growth and development in the age of globalization. The agreement between the United States and Taiwan, reached in 1988 as part of Taiwan's World Trade Organization accession package,

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has made access to foreign goods and services easier, mainly through the reduction of trade barriers (Wang & Heitmeyer, 2006). Exports of goods and services from the United States to Taiwan have increased from \$4.7 billion in 1985 to \$37 billion in 2011. Taiwan is the world's fourth largest holder of foreign exchange reserves, with over US\$382 billion in 2010. Taiwan has become an attractive market for multinational companies owing to its steady and rapid economic growth, growing consumer affluence, and strong consumer demand. Real growth in GDP has averaged about 8% during the past three decades. Despite a regional financial crisis in 1997 Taiwan experienced real GDP growth rates of 5.7% in 1999. The Taiwan economy has rebounded sharply from the global financial crisis and enjoyed 10.47% GDP growth rate in 2010, low unemployment, and an appreciating currency that makes U.S. goods and services more attractive than ever to Taiwan buyers (Central Intelligence Agency, 2012).

Taiwan is fast becoming a consumer society and has a rapidly growing retail sector. In particular, with the appreciation of the Taiwanese dollar significant opportunities have opened up for foreign makers of household appliances. Increasing spending power of consumers in Taiwan has been a boon to many industries, including the major household appliances sector with an exponential increase of 23% and 19%, respectively, in overall sales and volume compared with 2010.

China and its neighbors remain the most attractive destinations in the world. Foreign marketers see Taiwan as a gateway for other Asian markets, and the experience gained in the Taiwanese market regarding consumers, business relations, and culture might be of great value, not only for targeting China but also other Asian markets with high concentrations of ethnic Chinese inhabitants.

One of the challenges that international marketers confront is the paucity of research exploring consumers' evaluations and purchase intentions regarding imported vis-à-vis domestic products in Taiwan and other newly industrialized countries in Asia. In addition, their research findings in this literature are somewhat confusing. Past research found that the effect

of world-mindedness (Rawwas et al., 1996) on product evaluation is enhanced for foreign products and is diminished for domestic products; however, the impact of nationalism and ethnocentrism on product evaluation is enhanced for domestic products and is diminished for foreign products (Chan, Chan, & Leung, 2010; Parker & Haytko, 2011; Shimp & Sharma, 1986). In addition, consumers harboring anger toward a specific country present negative attitudes toward consumption of foreign goods from a firm's host country (Klein, Ettenson, & Morris, 1998), while consumers adhering to a global consumer orientation present a positive attitude toward global products (Steenkamp & De Jong, 2010). In the study of Parker and Haytko (2011), Chinese consumers held a rather positive view of, and little animosity toward, the United States. These results would suggest openness toward foreign products.

With the growing importance of the Chinese domestic market, developing a deeper understanding of Chinese consumer behavior is becoming strategically important (Chan, Cui, & Zhou, 2009; Sun & Collins, 2004). More researchers are now undertaking both empirical and theoretical research to better understand Chinese consumers' patterns of purchasing behavior with regard to foreign goods (Chan & Lin, 1992; Cheung & Denton, 1995; LaTour & Henthorne, 1990; Strutton, Pelton, & Tudor, 1987; Sun & Collins, 2004). Past research efforts, primarily focusing on student populations drawn from Taiwan, Hong Kong, Singapore, and/or mainland China, shed some light on Chinese consumers' buying behavior; however, these researchers have expressed the need for more studies in this important and growing area. Although competition between the United States and Japan is increasingly intense in all the world markets, it is particularly so in East Asia, which Japan considers as its "home turf."

In sum, despite the growing importance of the Taiwanese market in this globalized world, there has been a lack of research aimed at better understanding of the Taiwan Chinese consumers' purchasing behavior in the context of imported vis-à-vis domestic products. This study tries to fill this research gap by investigating antecedents of Taiwan Chinese consumers' foreign-made

product purchase intention. Therefore, the purpose of this article is to explore a comprehensive model of antecedents of Taiwan Chinese consumers' intentions toward U.S.-made and Japanese-made household appliances. More specifically, this study attempts to develop a testable, comprehensive model using theoretically based constructs and to test it empirically using field data from Taiwan Chinese consumers. Based on the findings of the study, managerial implications are discussed.

This article makes three important contributions. First, the authors propose the comprehensive model of antecedents of foreign product preference by integrating various constructs from the literature found important in the international consumer behavior literature. Second, it extends research on consumers' preference of domestic products versus foreign products by empirically testing this comprehensive model. Third, it strengthens the understanding of the Taiwan Chinese consumers' purchasing pattern that offers paramount implications for foreign marketers when expanding their market in other Asian countries. Finally, this research contributes to generalization of findings by using field data from Taiwan Chinese consumers.

Terminology can be confusing when referring within the same study to nationals of Taiwan as well as to nationals of the Peoples' Republic of China. In an effort to avoid semantic confusion, we will hereafter use the term "Taiwan consumers," most of whom are of ethnic Chinese background, when referring specifically to consumers who are nationals of Taiwan. We reserve the term "Chinese consumers" for times when we refer specifically (and less frequently) to the nationals/consumers of the Peoples' Republic of China or in a more general sense to the extended global Chinese market, which of course includes Taiwan, the Peoples' Republic of China, and the vast diaspora of Chinese consumers throughout Asia and the rest of the world.

LITERATURE REVIEW AND DEVELOPMENT OF HYPOTHESES

This section presents a model that focuses on a set of hypothesized influences on Taiwan Chi-

nese consumers' intentions to buy foreign products. The model integrates various contributions from the literature involving consumer nationalism, country-of-origin effects, traditional cultural values orientation, and purchase intentions. In addition, the conceptualization integrates several other constructs found important in the international consumer behavior literature. These include openness to foreign culture, product familiarity, and demographic characteristics.

Figure 1 presents the overall model, where influences flow from the exogenous constructs to the endogenous constructs. The following section provides a discussion of each construct of the model and a justification of the influences from the antecedent constructs to the affected constructs. These proposed relationships will be formally stated as hypotheses for empirical testing.

Relationship Between Traditional Cultural Values Orientation and Consumer Nationalism

"Consumer nationalism" refers to consumers' intense, emotion-laden, generalized preference for domestic products and prejudice against foreign products (Kaynak & Kara, 2002). Other researchers have variously termed it "consumer ethnocentrism" (Shimp & Sharma, 1987) and "consumer patriotism" (Han, 1988). From the perspective of individuals with a high degree of consumer nationalism, purchasing of foreign-made products is inappropriate, harmful to their nation's economic interests, unpatriotic, and even immoral. Consumer nationalism is an important construct in understanding consumers' evaluations and purchase intentions regarding foreign-made products. Clearly, it is useful to identify the significant antecedents and consequences of consumer nationalism (Javalgi, Khare, Gross, & Scherer, 2005; Shankarmahesh, 2006).

Researchers have attempted to empirically investigate the cultural values orientation of the Chinese by employing different methods appropriate to the measurement of values at different levels (Yang, 1986). At the highest level of one's value system are what may be termed "value orientations," which were defined by Kluckhohn

FIGURE 1. The Hypothesized Causal Model of Taiwan Consumers' Purchase Intentions Toward U.S.-/Japan-Made Household Appliances

and Strodbeck (1961). These studies have used Chinese students in Taiwan and Hong Kong as subjects; the findings are consistent on some orientation modalities but inconsistent on others. Many research studies conducted in Taiwan and Hong Kong using Kluckhohn and Strodbeck's framework found that Chinese students tend to have a dominant profile of value orientation comprising inner development, individu-

alism, and future perspective (Lin, 1978; Liu, 1966; Yang & Chang, 1975; Wang, 1981; King & Bond, 1985). These cultural orientation dimensions are incongruent with the common image of the traditional Chinese as a people who have a collectivistic and hierarchical emphasis in human relationships, a past perspective, and submission to nature (Ha, 1971; Kluckhohn & Strodbeck, 1961).

A review of the relevant literature also discloses that there have been several studies focusing on changes in Chinese needs (Hang & Yang, 1972; Hchu & Yang, 1972; McEwen, Fang, Zhang, & Burkholder, 2006; Yang, 1986; Yang & Lang, 1973). These studies seem to indicate that as social change continues, the Chinese tend to have a higher need for exhibition, autonomy, and individual-oriented achievements and a lower need for deference, abasement, and the attainment of social status and affection through traditional means.

The confluence of several developments—globalization of business and media and increased exposure to Western thought and values—may have also played an important role in transcending traditional cultural values among the Chinese, especially in Taiwan, Hong Kong, and Singapore. Such a shift in value orientation of Taiwan consumers can be expected to have a positive influence on their receptivity to foreign products.

- H1: The greater the traditional Chinese cultural values orientation of Taiwan Chinese consumers, the greater is the degree of consumer nationalism.

Relationship Between Openness to Foreign Cultures and Consumer Nationalism

With reference to cultural openness, Sharma, Shimp, and Shin (1995) noted that “individuals differ in terms of their experience with and openness toward the people, values, and artifacts of other cultures” (p. 28). Without denying the strong impact that culture has on attitudes and behavior, individuals are nevertheless endowed with a free will to exercise and be open to respond to external cultural milieu. Individuals who had greater interaction with other cultures can be expected to be less likely to exhibit prejudice against foreign cultures and consumer nationalism (Javalgi et al., 2005).

Papadopoulos and Heslop (1986) pointed out that those consumers who have traveled to a foreign country generally tend to develop positive views about that country. Such views may off-

set the negative image and publicity concerning the country's problems, and consumers become more interested to learn more about that country's culture and products. With significant growth in the number of Taiwan Chinese people who visit other foreign countries for education, tourism, or business purposes, one can expect increasing openness to foreign cultures.

Only recently, researchers have offered some empirical valuation of the relationships between consumer nationalism and openness to foreign culture. Sharma et al. (1995), for instance, found a negative correlation between cultural openness and Korean consumers' ethnocentrism. Thus, the following hypothesis is proposed.

- H2: Taiwan Chinese consumers who are more open to foreign cultures exhibit fewer consumer nationalism tendencies.

Relationship Between Consumer Demographic Characteristics and Consumer Nationalism

Consumer demographic characteristics are often considered to have an impact on consumer nationalism (Javalgi et al., 2005). Older individuals are generally viewed as conservative and are expected to exhibit greater consumer nationalism and favorableness toward domestic products (Bannister & Saunders, 1978; Han, 1988; Schooler, 1971; Wall & Heslop, 1986). However, one study of Korean consumers (Sharma et al., 1995) found no support to show that age and consumer ethnocentrism/nationalism are significantly correlated.

Several research studies also suggested that greater levels of consumer sophistication (as indicated by better education, higher income, and higher occupational status) imply more cosmopolitan attitudes and generally more favorable views toward foreign products (Javalgi et al., 2005). Specifically, several product-country image studies have found that consumer ethnocentric/nationalism tendencies decrease with greater levels of educational achievements and higher levels of income (Anderson & Cunningham, 1972; Schooler, 1971; Sharma et al., 1995; Wahl & Heslop, 1986;

Wang, 1978; Watson & Johnson, 1972). In light of this literature support, it is proposed that:

- H3: Taiwan consumers who are younger tend to exhibit lower consumer nationalism.
- H3a: Taiwan consumers who are more sophisticated (in terms of education, income, and occupation levels) tend to exhibit lower consumer nationalism.

Relationship Between Consumers' Age/Sophistication and Foreign Product Familiarity

Assessing the level of product familiarity/knowledge is important because of its implications for actionable marketing practices. An important goal of advertising practitioners is to enhance relevant product familiarity/knowledge of targeted consumers, which is a conglomeration of many different types of information including awareness of the product category, product attributes/features, and beliefs about the product category in general and selected brands in particular (Engel, Blackwell, & Miniard, 1995).

A majority of empirical research studies found that the younger the consumers, the more familiar they feel toward foreign products (Banister & Saunders, 1978; Han, 1988; Schooler, 1971; Wall & Heslop 1986). In a study of consumer decision processes in the People's Republic of China, Chan and Lin (1992) examined the relationship between product knowledge about consumer products and demographic characteristics of consumers. They found that the better educated and/or higher income respondents tend to have more product knowledge. Hence, the following hypotheses are proposed:

- H4: Taiwan consumers who are younger tend to be more familiar with foreign (U.S.- and Japanese-made) products.
- H4a: Consumers who are more sophisticated (in terms of education, income, and occupational status) tend to be more familiar with foreign (U.S.- and Japanese-made) products.

Relationship Between Foreign Product Familiarity and Product-Country Image

National differences in responses to country image may also reflect the level of familiarity that a country's consumers have regarding products of the producing nations (Yaprak & Parameswaran, 1986), as well as the level of international amity or animosity between the specific producer and consumer countries (Schooler, 1965).

Researchers have noted a greater utilization of the country image variable as a determinant of product evaluations for those product categories about which specific product information was not adequately diffused in the markets studied (Yaprak & Parameswaran, 1986). When consumers have very little information on product attributes stored in their memory, they tend to use indirect evidence (such as "made in" labels) to evaluate products or brands (Johansson, 1988). It is reasonable to expect that consumers with greater product familiarity will have greater knowledge and make greater use of non-country-of-origin information in evaluations of foreign products (Samiee, 1994).

A consumer's knowledge about a product's origin has been shown to have a significant impact on subsequent product evaluations (e.g., McEwen, Fang, Zhang, & Burkholder, 2006). However, the manner in which a customer views this origin is less studied. Han (1989) suggested that "when consumers are not familiar with a country's product, the country-of-origin information may serve as a halo from which consumers infer product attributes and it may indirectly affect their brand attitude through their inferential beliefs. In contrast, as consumers become familiar with a country's product attributes it directly affects their brand attitude" (p. 228). Thus, past research suggested that product familiarity is a *moderating* variable affecting the degree of reliance on, and the process of, formation of product country image (e.g., halo versus summary construct). However, in the hypothesized model in the present study, the focus is on the exploration of a *direct* relationship between degree of product familiarity and *intensity* of product country image (Han, 1989). In regard to this relationship, past research was either moot

or inconclusive (Han, 1989). For this reason, the following hypothesis was stated in its null form:

- H5: No significant direct relationship exists between the degree of product familiarity and the intensity of product country image held by Taiwan Chinese consumers.

Relationship Between Consumer Nationalism and the Product-Country Image

One of the most important advances in the country-of-origin studies in the late 1980s was in the development and operationalization of the construct of consumer nationalism. This construct is based on the notion that consumers' consumer nationalism emotions have significant effects on attitude and purchase intentions. Researchers have used terms such as "national identity," "patriotism," and "ethnocentrism," and these are universal phenomena (Shimp & Sharma, 1987). Shimp and Sharma (1987), for instance, use the term "consumer ethnocentrism" to represent the beliefs held by consumers about the appropriateness and morality of buying foreign-made products. Ethnocentrism alludes to the notion that one's culture is superior to the cultures of others. From the perspective of ethnocentric consumers, purchasing of foreign-made products is inappropriate because it hurts the domestic economy, causes loss of jobs, and is unpatriotic.

Han (1988) examined the relationship between consumer patriotism and product-country image. His findings reveal that consumer patriotism has a significant influence on buyer perception of quality (the country-of-origin information) for foreign-made automobiles but not for foreign-made televisions. Thus, it is suggested that:

- H6: The stronger the consumer nationalism, the weaker is the foreign product-country images held by Taiwan Chinese consumers.

Relationship Between Consumer Nationalism and Purchase Intention Toward Foreign (U.S.-/Japan-Made) Products

Differential acceptance of foreign products on a national level may also reflect the levels of consumers' nationalism of a nation (Han, 1988; Hooley, Shipley, & Krieger, 1988; Mihalyi, 1984; Sharma et al., 1995). Shimp and Sharma (1987) found significant negative correlations between consumer ethnocentrism and evaluations of foreign product characteristics as well as attitudes toward, and purchase of, foreign automobiles. Highly ethnocentric consumers were found to accentuate the positive aspects of domestic products and to discount the virtues of foreign-made items. Country image studies have found an inverse relationship between consumer nationalism and purchase intention for foreign-made products (Anderson & Cunningham, 1972; Sharma et al., 1995; Wang, 1978). Thus, it is suggested that:

- H7: Taiwan consumers who exhibit higher consumer nationalism are less favorably disposed to purchase foreign-made products.

Relationship Between Product-Country Image and Purchase Intention Toward Foreign Products

The importance of a country's image is well known to many international marketers who use it country image, whether as a reference point or as a unique selling proposition, to enhance their product's chance of success. It is also known to just as many sellers who try to conceal it, fearing that if it were known consumers might associate negative feelings and possibly may not buy the product for that reason. The images of countries/products results from a people's perception of them and the phenomena that surround them. In a broad sense, the product's country image may lead to a range of reactions, from simple awareness, to attitude formation, to "intention to buy."

Roth and Romeo (1992) note that country image is the overall perception consumers form of product from a particular country, based on their prior perceptions of the country's production and marketing strengths and weaknesses. Consumer behavior is strongly influenced by attitudes toward a given country's products or brands. An attitude is simply an overall evaluation of an alternative, ranging from positive to negative. A person's behavioral intentions will depend on her or his attitudes. Consequently, consumers' intentions to perform some behavior (e.g., purchasing imported products) should increase as their attitudes become more favorable. A number of factors, including the level of economic development, the effect of time interval, and political and cultural factors can influence the extent to which attitude and behavioral intentions can predict behavior.

Several country image studies have suggested that consumers typically view foreign products from industrialized countries more favorably (Cordell, 1992; Schooler, 1971; Tongberg, 1972; Wang and Lamb, 1983). Other studies, using macro-measures of economic and political systems of nations, note that both variables significantly influence consumers' purchase behavior (Hallen & Johansson, 1985; Wang, 1978; Wang & Lamb, 1983). Since significant advances have been made in country image research, it is becoming possible to track changes in consumer attitudes toward foreign products over time. A longitudinal study conducted in Finland indicated an increase over time in a positive attitude among Finnish consumers for goods produced in the United States between 1975 and 1985. The increase in appreciation of Japanese products was greater, however. Finnish appreciation of British products appeared to have declined during the same time period (Darling, 1987; Darling & Arnold, 1988). Darling and Wood (1990) reported empirical evidence of changes in Finnish perceptions toward U.S. and Japanese products and marketing practices. Their report indicated that Finnish perception of Japanese products and marketing practices improved over the past decade. Furthermore, this improvement was significantly greater than that achieved by U.S. products.

Researchers have linked attitudes and intentions in order to predict consumer behavior for both existing and new products. Consequently, the relationship between attitudes and behavioral intentions has long been a main area of inquiry in country image studies. Understanding consumers' attitudes toward foreign-made products and their impact on purchase intentions is of paramount importance due to their greater implications for actionable marketing practices. Thus, it is suggested that:

H8: Purchase intentions toward foreign (U.S./Japan)-made products are positively influenced by product-country images held by Taiwan Chinese consumers.

METHODOLOGY

Focus Group

To select a suitable product category for the study, several focus group sessions were conducted—using trained interviewers (research professionals and graduate students from China and Taiwan)—with Taiwanese students at a major university in the United States a “high involvement” product with higher perceived risk was considered desirable because the key factors influencing purchase intention are more likely to be operative. Under conditions of high involvement, messages have greater personal relevance and elicit more personal connections (Petty & Cacioppo, 1979) and individuals are more likely to engage in more information processing and elaboration when forming attitudes compared with low involvement situations (Petty et al., 1983).

Since one of the objectives was to examine perceptions toward U.S. products, many products such as electronics and cameras, which are totally dominated by Japanese producers, were regarded unsuitable for the study. Automobiles were also rejected, as they are not as easily affordable in Taiwan as they are in the United States. From the focus group sessions, it was revealed that U.S. household appliances, specifically, refrigerators are widely available in Taiwan, as are Japanese brands. Prior research

(Beatty & Smith, 1987; Newman & Staelin, 1972) indicated that major household appliances entailed much prepurchase information search by consumers. For these reasons, refrigerators were chosen for the current study.

Survey

To examine hypothesized relationships in the proposed model, a research questionnaire was constructed in English first and then translated into Chinese. The translation was performed by Chinese scholars and experienced marketing research professionals. Since the respondents were Taiwan Chinese who spoke Mandarin, the official Chinese dialect in Taiwan, the questionnaire was written in Chinese with dialectic expressions frequently used in Taiwan.

To ensure translation equivalence, the translated questionnaire was reviewed by experts who are native of Taiwan who also communicate in English fluently. The Chinese version was back-translated into English. The two English versions were compared, and modifications were made until acceptance convergence of the two versions was achieved (Douglas & Craig, 1983; Green & White, 1976).

The questionnaire was pretested twice to examine the question phrasing, wording, logical sequence, a variety of questions, and so on. First, it was administered to Taiwanese students in the United States. The second pretest was conducted in Taiwan where the data collection took place. This pretesting procedure suggested some minor modifications in terms of wording and phrasing of the questions. Pretesting also assisted in modifying some of the statements to improve clarity and simplicity. Operationalization of the variables is presented in Table 1.

Data Collection Procedure

Data for the study were collected using the personal interview method with trained and experienced interviewers. The mall intercept method was used as it is widely accepted as a means of gathering data for market research when dealing with international consumers (Lavrakas, 2007). The interviewers' task was to "intercept" shoppers according to a designated "sampling interval," ask the questions

from the questionnaire, and record the responses. Each respondent was offered a monetary incentive to complete the interview. Data were collected from the four largest Taiwan municipalities, which represent over 65% of the population: Taipei, Kaoshiung, Taichung, and Tainan. The procedure yielded 586 usable surveys for this study. The demographic profile of the sample (in terms of gender, age, income, and education) was statistically equivalent to that of the Taiwanese population as reported in the Statistical Yearbook of the Republic of China. Table 2 provides the demographic details of the survey respondents.

Analysis

Tests of the hypotheses were performed using LISREL analysis. The analysis followed a two-stage procedure. In the first stage, the measurement model was established. In this stage, Cronbach's α , exploratory factor analysis, and confirmatory analyses were used to select the indicators to be used to assess the measurement model.

At the second stage of the analysis, the relationships hypothesized in the conceptual model shown in Figure 1 were tested using the structural modeling approach. LISREL 7 (Joreskog & Sorbom, 1989) was used to test the hypothesized relationships. Estimates of parameters and reliabilities for the structural measurement model were obtained using maximum likelihood solutions.

The following steps were used to evaluate the maximum likelihood solution. First, a χ^2 goodness-of-fit was used to evaluate whether the proposed model fits the data. Second, two indicators of goodness-of-fit index (GFI) and root mean square residual (RMR) were used. Values indicating a good representation of the data are a GFI in excess of .90 and an RMR typically below .05 (Bagozzi & Yi, 1988).

Confirmatory Factor Analysis/Measurement Model

The measurement model specifies the indicators for each construct and assesses the reliability of each construct for use in estimating the causal

TABLE 1. Operationalization of Variables

Construct	Operationalization	Literature support
Traditional Chinese values (exogenous variable)	Traditional cultural values was operationalized by a 5-point scale (<i>strongly disagree</i> to <i>strongly agree</i>). Chinese proverbs were used as measurement items, including "Humility receives benefits," "A family will be prosperous if it is in harmony," "Children have to respect the decisions of their parents," and "A man depends on his parents at home, and his friends in society."	Jarvie and Agassi (1969); King and Myers (1977); Kindle (1983); Ho (1977); Hsu (1967); Dawson (1967); Chiu (1972); Scofield and Sun (1960); Ando (1960); Shively and Shively (1972); Yang (1981; 1986); Yang and Hchu (1974); Lei and Yang (1984); Yang and Hwang (1984); Yau (1994)
Consumer nationalism (endogenous variable)	Consumer nationalism response is measured by the respondents' feelings ("How strongly do you agree or disagree toward the following?" statements). These measures are intended to capture the dimensions of consumer nationalism which are specifically related to the selection of foreign products, not broad concepts of political nationalism. For example: "There should be very little trading or purchasing of goods from other countries unless out of necessity," and "Buying foreign products hurts our economy and countrymen."	Shimp and Sharma (1987); Sharma, Shimp, and Shin (1995); Lyn (1976); Mihalyi (1984), Rushton (1989); Han (1988); Wang (1978)
Openness to foreign cultures (exogenous variable)	Openness to foreign culture reflects the respondent's acceptance of what is not in-digenous. It is measured by a 5-point scale (<i>strongly disagree</i> to <i>strongly agree</i>) with statements like "I like to travel in foreign countries," and "I like to keep up with international affairs."	Howard (1989); Shimp and Sharma (1987); Sharma, Shimp, and Shin (1995); Kao (1995); Papadopoulos and Heslop (1986)
Consumer sophistication (exogenous variable)	Consumer's education, occupation, and income are measured on a 5-point scale and combined into an index.	Sharma, Shimp, and Shin (1995), Han (1988), Schooler (1971), Chan and Lin (1992), Singh (1990)
Product familiarity (endogenous variable)	The level of familiarity with household refrigerators made in U.S./Japan is measured on a self-reported 5-point scale ranging from 1 (<i>very extensive</i>) to 5 (<i>very limited</i>).	Chan and Lin (1992); Engel, Blackwell, and Miniard (1995); Han (1989)
Purchase intention (endogenous variable)	This variable is measured by a 5-point scale anchored by <i>will not buy</i> to <i>will buy</i> , with measures such as, "What is the likelihood that you would buy a refrigerator made in this country?"	Katona (1960); Bagozzi and Baumgarten (1989); McQuarrie (1988)
Product-country image (endogenous variable)	Product-country-image is measured using a 5-point semantic differential scale covering various dimensions of country image such as "prestigious," "workmanship," "well-known brand," and "innovativeness." These dimensions have also been consistently used by previous studies, and are related to the perception of a country's production and marketing strengths and weaknesses.	Schooler (1965); Han (1989); Bilkey and Nes (1982); Saminee (1994); Chao (1993); Sauer, Young, and Unnava (1991); Erickson, Johansson, and Chao (1984); Johansson, Douglas, and Nonoka (1985); Obermiller and Spangenberg (1988); Hong and Toner (1988); Roth and Romeo (1992)

TABLE 2. Demographics of the Respondents

	Sample data	Official data
Gender		
Male	311 (53%)	52%
Female	275 (47%)	48%
Age (yr)		
18-24	88 (15%)	13%
25-29	83 (14%)	14%
30-40	176 (30%)	27%
41-50	100 (17%)	18%
51 and older	139 (24%)	28%
Education level		
Primary school	148 (25%)	32%
High school	268 (46%)	46%
Junior college	75 (13%)	12%
University	65 (11%)	9%
Graduate school	30 (5%)	1%
Occupation		
Professional	185 (32%)	25%
Sales	104 (18%)	14%
Clerical	76 (13%)	13%
Blue collar	190 (32%)	39%
Agriculture	30 (5%)	9%

relationships between and among the constructs. Measurement of each construct can be assessed for unidimensionality and reliability.

The model was fit separately for two respondent groups: (a) those who indicated that they would consider buying a domestic or U.S.-made refrigerator but not a Japanese-made refrigerator ("domestic/U.S.-made choice group") and (b) those who indicated that they would consider buying a domestic or Japanese-made refrigerator but not a U.S.-made refrigerator ("domestic/Japanese-made choice group"). A respondent, for example, was categorized under "would consider buying a U.S.-made refrigerator" if the respondent gave a rating of "4" or "5" on a 5-point scale in response to the purchase intention question: "What is the likelihood that you would buy a refrigerator from ... (country)?" with the scale anchors of 1 (*will not buy*) to 5 (*will buy*).

Table 3 shows that estimates of the constructs have acceptable reliability and demonstrate discriminant validity for both analysis groups. It presents a summary of the critical ratios generated by the LISREL analysis. It reveals that each

indicator was significant beyond .05 level (the *t* values range from 2.283 to 14.455).

For the "domestic/U.S.-made choice group," the construct reliability estimates for the latent constructs range from .803 to .965 (Table 3). A commonly acceptable reliability is .70 (Hair et al., 1992). This suggests that the scale reliabilities in the current study have adequate and stable measurement properties.

For the "domestic/Japanese-made choice group," the construct reliability estimates for the latent constructs range from .843 to .969. This further reinforces that the scale reliabilities in the current study have adequate and stable measurement properties.

Another measure of reliability is the discriminant validity, which is the variance-extracted measure. This measure reflects the overall amount of variance in the indicators accounted for by the latent construct. Higher variance extracted values occur when the indicators are truly representative of the latent construct. The variance-extracted measure is a complementary measure to the construct reliability value. Hence, to further measure the reliability and discriminant validity of the model, a confirmatory factor analysis for the latent constructs was conducted.

Hair et al. (1995) recommend that the variance-extracted value for a construct should exceed .50. For the "domestic/U.S.-made choice group," variance extracted measures range from .604 to .846, while for the "domestic/Japanese-made choice group," variance extracted measures range from .653 to .863, thus indicating that the required criterion is met.

Overall Model Fit

The LISREL program provides a number of indicators that may be used to evaluate how well the models fit the data. A χ^2 statistic with associated degrees of freedom is provided to evaluate the null hypothesis that the intercorrelations produced by the hypothesized model are equal to the measured or observed correlations. An indication of a good model would be a small χ^2 for the associated degrees of freedom resulting in a probability of .10 or higher. The χ^2 statistic is, however, sensitive to sample size and often

TABLE 3. Estimated Maximum Likelihood Parameters and Reliabilities for the Measurement Model (Confirmatory Factor Analysis)

Construct/indicator	Parameter	Respondents who will consider buying domestic or U.S.-made refrigerators (<i>t</i> value)	Respondents who will consider buying domestic or Japan-made refrigerators (<i>t</i> value)
Chinese Cultural Values (ξ_1)			
A man depends on his parents at home, and his friends in society	λ_{11}	.364 (3.963)	.770 (8.038)
One should leave room for an opponent to save face.	λ_{21}	.401 (4.163)	.589 (7.488)
Haughtiness invites ruin; humility receives benefits	λ_{31}	.517 (4.497)	.633 (8.395)
Children have to respect the decisions of their parents	λ_{41}	.645*	.540*
Openness to Foreign Culture (ξ_2)			
I like to keep up with international affairs.	λ_{52}	.615 (4.493)	.843 (3.070)
I am interested in foreign cultures.	λ_{62}	.501 (5.211)	.377 (3.115)
I enjoy foreign films and TV programs.	λ_{72}	.542 (5.095)	.411 (2.283)
I make special efforts to meet foreigners.	λ_{82}	.398*	.178*
Consumer Nationalism (η_1)			
I feel guilty if I choose to buy foreign products over domestic products.	λ^y_{11}	.389 (3.008)	.495 (4.282)
There should be very little trading or purchasing of goods from other countries unless out of necessity.	λ^y_{21}	.352*	.415*
Buying foreign products hurts our economy and countrymen.	λ^y_{31}	.517 (3.117)	.648 (4.549)
Product-Country Image (η_3)			
Appliances made in ... are carefully produced and have fine workmanship.	λ^y_{53}	.631 (11.093)	.633 (11.131)
Appliances made in ... show a very high degree of technological innovation	λ^y_{63}	.858 (13.932)	.849 (14.015)
The appliances made in ... are prestigious.	λ^y_{73}	.761 (3.184)	.768 (3.160)
In general, I like appliances made in ...	λ^y_{83}	.787 (14.455)	.781 (14.015)
The appliances made in ... offer high value.	λ^y_{93}	.199*	.196*
Construct Reliability			
Traditional Chinese Values Orientation		.803	.924
Openness to Foreign Cultures		.805	.928
Consumer Nationalism		.928	.843
Country Image		.965	.969
Variance Extracted			
Traditional Chinese Values Orientation		.604	.755
Openness to Foreign Culture		.609	.767
Consumer Nationalism		.815	.653
Country Image		.846	.863

provides misleading conclusions with large sample sizes (Bagozzi & Yi, 1988). Therefore, other indicators of fit provided by the LISREL program, which are less sensitive to sample size, should be used, such as GFI, adjusted GFI (AGFI), and RMR. Values indicating good representativeness of the data are a GFI or an AGFI

in excess of .90 and an RMR typically less than .05 (Bagozzi & Yi, 1988).

Table 4 shows that the proposed model fits the data well. The values of the fit indices were $\chi^2 = 353$; $df = 160$; GFI = .906; AGFI = .875; and RMR = .051 for the "domestic/U.S.-made choice" group, and $\chi^2 = 360$; $df = 160$; GFI =

TABLE 4. Parameter Estimates and Results of Hypotheses Testing

Hypothesis	Respondents who will consider buying domestic or U.S.-made refrigerators (<i>t</i> value, <i>SE</i> , <i>p</i> <)	Result	Respondents who will consider buying domestic or Japan-made refrigerators (<i>t</i> value, <i>SE</i> , <i>p</i> <)	Result
H1: The greater the traditional Chinese cultural value orientation, the greater the consumer nationalism.	$\gamma_{11} = .265$ (1.712; .118; .05)	Supported	$\gamma_{11} = .268$ (2.031; .103; .05)	Supported
H2: Taiwan consumers who are more open to foreign cultures show less consumer nationalism tendencies.	$\gamma_{12} = -.317$ (2.815; .135; .005)	Supported	$\gamma_{12} = -.244$ (1.885; .086; .05)	Supported
H3: Taiwan consumers who are younger tend to be lower in consumer nationalism.	$\gamma_{13} = -.184$ (2.324; .035; .05)	Supported	$\gamma_{13} = -.126$ (1.368; .030; .10)	Not supported
H3a: Taiwan consumers who are more sophisticated tend to exhibit lower consumer nationalism.	$\gamma_{14} = -.131$ (1.405; .014; .10)	Not supported	$\gamma_{14} = -.107$ (1.30; .015; .10)	Not supported
H4: Taiwan consumers who are younger tend to be more familiar with foreign products.	$\gamma_{23} = .126$ (1.883; .030; .05)	Supported	$\gamma_{23} = .104$ (1.30; .027; .10)	Not supported
H4a: Taiwan consumers who are more sophisticated tend to be more familiar with foreign products.	$\gamma_{24} = .199$ (2.962; .014; .025)	Supported	$\gamma_{24} = .132$ (1.30; .012; .10)	Not supported

(Continued)

TABLE 4. Parameter Estimates and Results of Hypotheses Testing (Continued)

Hypothesis	Respondents who will consider buying domestic or U.S.-made refrigerators (<i>t</i> value, <i>SE</i> , <i>p</i> <)	Result	Respondents who will consider buying domestic or Japan-made refrigerators (<i>t</i> value, <i>SE</i> , <i>p</i> <)	Result
H5: The lower the familiarity of the country's product, the higher the reliance on the country image perception.	$\beta_{32} = -.424$ (1.642; .112; .10)	Not supported	$\beta_{32} = -.357$ (1.452; .102; .10)	Not supported
H6: The stronger the consumer nationalism, the weaker the foreign product-country images held by Taiwan Chinese consumers.	$\beta_{31} = -.269$ (2.461; .121; .01)	Supported	$\beta_{31} = -.198$ (2.522; .070; .01)	Supported
H7: Taiwan consumers who are higher in consumer nationalism will be less favorably disposed to purchase foreign made products.	$\beta_{41} = -.123$ (1.307; .035; .10)	Not supported	$\beta_{41} = -.126$ (1.585; .052; .10)	Not supported
H8: Purchase intentions toward foreign made products are positively influenced by product-country images held by Taiwanese consumers.	$\beta_{43} = .158$ (2.364; .058; .025)	Supported	$\beta_{43} = .154$ (2.297; .051; .01)	Supported
Overall model fit	GFI = .906; AGFI = .875; RMR = .051; $\chi^2 = 353$, <i>df</i> = 160		GFI = .901; AGFI = .873; RMR = .056; $\chi^2 = 360$, <i>df</i> = 160	

.901; AGFI = .873; and RMR = .056 for the "domestic/Japanese-made choice" group. Overall, these indices suggest good fit of the data to the proposed model.

Results of the Hypothesized Relationships

H1 posited that a higher traditional Chinese cultural value orientation, contribute to a greater the consumer nationalism among Taiwan Chinese consumers. This hypothesis received statistical support from both analysis groups. For the domestic/U.S.-made choice group, $\gamma_{11} = .265$ ($t = 1.712$, with $p < .05$). For the domestic/Japanese-made choice group, $\gamma_{11} = .268$ ($t = 2.031$, with $p < .025$).

Our second hypothesis proposed that Taiwan consumers who are more open to foreign culture exhibit less consumer nationalism tendencies. This hypothesis was also supported for both analysis groups. For the domestic/Japanese-made choice group, $\gamma_{12} = .244$ ($t = 1.885$ and $p < .05$), while for the other analysis group, $\gamma_{12} = .317$ ($t = 2.815$ and $p < .01$).

In H3, it was suggested that Chinese consumers who are younger tend to exhibit less consumer nationalism. The hypothesis was supported for the domestic/U.S.-made choice group ($\gamma_{13} = -.184$, $t = 2.324$, $p < .05$), but was not supported at the customary .05 significance level for the domestic/Japanese-made choice sample ($\gamma_{13} = -.126$, $t = 1.368$, $p < .10$). Extending H3, H3a implies that Chinese consumers who are more sophisticated (i.e., better educated, more professional occupations, and have a higher income; Singh, 1990) and tend to be less nationalistic (as consumers). This implication was not supported at the customary .05 significance level for considering buying domestic vs. U.S.-made products ($\gamma_{14} = -.131$, $t = 1.405$, $p < .10$), or for the sample considering buying domestic vs. Japanese-made appliances ($\gamma_{14} = -.107$, $t = 1.30$, $p < .10$).

H4 and H4a address the relationship between product familiarity and demographic factors. It was expected that Chinese consumers who are younger tend to be more familiar with U.S.-made and Japanese-made appliances. H4 was supported by the sample considering a choice of domestic vs. U.S.-made appliances ($\gamma_{23} = .126$,

$t = 1.883$, $p < .05$), but was not supported at the customary .05 significance level considering choice of domestic vs. Japanese-made refrigerators ($\gamma_{23} = .104$, $t = 1.30$, $p < .10$). H4a is supported by the domestic vs. U.S.-made choice sample ($\gamma_{24} = .199$, $t = 2.962$, $p < .025$), but was not supported at the customary .05 level by the sample considering choice of domestic vs. Japanese-made refrigerators ($\gamma_{24} = .132$, $t = 1.30$, $p < .10$).

H5 suggested no direct relationship between product familiarity and product country image. The null hypothesis was accepted by the sample considering a choice of domestic vs. U.S.-made appliances ($\beta_{32} = -.424$, $t = 1.642$, $p < .10$) as well as the sample considering a choice of domestic vs. Japanese-made appliances ($\beta_{32} = -.357$, $t = 1.452$, $p < .10$).

H6 examined the influence of consumer nationalism on product-country image. H6 posited that consumer nationalism has a negative effect on Chinese consumers' perceptions of a foreign country's (U.S.- or Japanese-made) products. Both the analysis samples strongly supported this claim. For the domestic/U.S.-made choice group ($\beta_{31} = -.269$, $t = 2.461$, $p < .01$) and the domestic/Japan-made choice group ($\beta_{31} = -.198$, $t = 2.522$, $p < .01$).

H7 hypothesized that consumer nationalism has a negative influence upon the purchase intention of foreign-made (U.S./Japanese) refrigerators. This hypothesis was not supported at the customary .05 significance level by the sample considering a choice of domestic vs. U.S.-made refrigerators ($\beta_{41} = -.123$, $t = 1.307$, $p < .10$), or by the sample considering a choice of domestic vs. Japanese-made refrigerators ($\beta_{41} = -.126$, $t = 1.585$, $p < .10$).

The final hypothesis H8 posited that purchase intentions of Chinese consumers are influenced by the strength of the product country image held by consumers. This hypothesis is strongly supported by the sample considering a choice of domestic vs. U.S.-made refrigerators ($\beta_{43} = .158$, $t = 2.364$, $p < .025$), and also by the sample considering a choice of domestic vs. Japanese-made refrigerators ($\beta_{43} = .154$, $t = 2.2974$, $p < .01$).

In summary, four relationships were supported by both of the analysis samples: the relation between traditional Chinese cultural value

TABLE 5. Comparison of Perceptions of Marketing Practices Associated With U.S.- and Japanese-Made Appliances

Marketing practices	Respondents who will consider buying domestic or U.S.-made refrigerators	Respondents who will consider buying domestic or Japanese-made refrigerators	Prob. of sig.
The advertisements of appliances made in ... are believable and provide a reliable source of product information.	3.215	3.111	.10
Appliances made in ... are available in the retail stores in which one expects to find them.	2.932	3.927	.01
Appliances made in ... are well-displayed and merchandised in retail stores.	3.241	3.724	.05

orientation and consumer nationalism (H1), the link between openness to foreign cultures and consumer nationalism (H2), the relationship between consumer nationalism and product-country image (H6), and the link between product-country image and purchase intention (H8). The positive correlation between product-country image and purchase intention is well known from prior research. The importance and strength of the consumer nationalism construct are further underscored in the current study. Although not a direct influence on purchase intentions toward foreign-made products, consumer nationalism has a strong indirect effect on purchase intention via the product-country image construct. As discussed, Taiwan Chinese consumers' traditional cultural values orientation and openness to foreign cultures have direct effects on consumer nationalism, and hence are important antecedents in explaining the purchase intentions toward foreign-made goods by Taiwan Chinese consumers. A summary of the LISREL results of the hypothesized relationships is shown in Table 4.

CONCLUSIONS

Managerial Implications

The purpose of this study is to understand the factors influencing Taiwan's Chinese consumers' purchase intentions toward U.S. and Japanese household appliances. It attempts to develop and test a comprehensive

model linking such purchase intentions to several constructs including Taiwan Chinese consumers' openness to foreign cultures, consumer nationalism, product familiarity, traditional cultural values orientation, and product-country image. The findings of the study suggest that consumer nationalism has a strong indirect effect on purchase intention via the product-country image construct. Taiwan Chinese consumers' traditional cultural values orientation and openness to foreign cultures have direct effects on consumer nationalism, and hence are important antecedents in explaining the purchase intentions toward foreign-made goods by Taiwan Chinese consumers.

The United States faces intense competition from Japan in many international markets. This is especially true in East Asia, which Japan considers as its "home turf." It is critically important for U.S. marketers to understand consumer perceptions and related factors that influence purchase intentions toward U.S.-made and Japanese-made products in a dynamic and growing consumer market such as Taiwan. The current study demonstrates that purchase intentions of Taiwan consumers toward U.S.-made (and Japanese made) refrigerators are influenced by the emotional factor of consumer nationalism.

U.S. marketers of household appliances such as refrigerators should recognize that consumer nationalism is a central construct in understanding Taiwan Chinese consumers' purchase intentions toward foreign products. However, the

influence of consumer nationalism on purchase intentions toward U.S.-made (and Japanese made) products is not direct, but occurs indirectly through its impact on product-country images. The research also suggests that consumer nationalism may be a useful segmentation basis for selecting target markets and formulating effective marketing strategies by U.S. marketers. In the case of Taiwan consumers considering a choice between domestic versus U.S.-made refrigerators, lower consumer nationalism is marked by antecedents of younger age, openness to foreign cultures, and lower identification with traditional Chinese cultural values. Thus, the study suggests that, when designing their marketing strategies targeted at younger Taiwan families (a primary target market for them), U.S. marketers may benefit from emphasizing the brand's country of origin, status image, and identification with Western values in their marketing communications strategies. To the extent that they target the "older segment," U.S. marketers may need to utilize appropriate media targeted selectively at this group, downplay the "made in USA" aspect of the product, and use brand names that do not automatically evoke perceptions associated with the country of origin (Levin & Jasper, 1996; Reardon, Miller, Vida, & Kim, 2005).

In the case of Taiwan consumers considering a choice between domestic versus Japanese made refrigerators, consumer nationalism was not significantly influenced by age. Thus, for Japanese marketers age-based market segmentation may not be a viable strategy. It is also important to note in this context, that a significant negative relationship between consumer nationalism and product-country image was observed for the domestic versus Japanese-made choice group as well as for the domestic versus U.S.-made choice group (see H6, Table 4). Apparently, this relationship was not significantly mitigated by the fact that the degree of cultural similarity of Japan to Taiwan is much greater than that of the United States to Taiwan. Some past studies have suggested that highly ethnocentric consumers may have more favorable attitudes toward products from culturally similar foreign countries (Johansson et al., 1985; Lantz & Loeb, 1996; Shimp & Sharma, 1987). It is possible that potential effects of cultural similarity

may have been counteracted by effects of Chinese consumers' (war and economic) animosity toward Japan noted in some recent empirical studies conducted in the People's Republic of China (Klein, Eltenson, & Morris, 1998).

A major implication for Japanese manufacturers marketing in Taiwan is that one way to overcome the unfavorable effects of Taiwan Chinese consumer nationalism on product-country image (and purchase intentions) regarding Japanese products is to emphasize product attributes, benefits, and competitive advantages and downplay the product's country of origin. Japanese manufacturers must conduct extensive market research to carefully assess the functional/value/service/location-related needs of Taiwan consumers in developing and marketing of household appliances in Taiwan.

A comparison of Taiwan Chinese consumers' perceptions of marketing practices associated with U.S. products and Japanese products (Table 5) suggests additional insights for U.S. and Japanese marketers. The results reveal that Taiwan consumers rate Japanese made refrigerators significantly higher than their U.S. counterparts in terms of wide availability in retail stores and also in terms of retail display and merchandising. These results are not surprising. Unlike some other countries in East Asia, Taiwan did not place severe restrictions on the development of retail chains by foreign companies. The Japanese were also among the first to enter the Taiwan market with modern retailing methods. They have been particularly successful in general merchandising, and have a dominating presence in department stores and hypermarkets which normally carry household appliance product lines.

If U.S. marketers of household appliances wish to improve their market position, they will need to boost consumer perceptions regarding retail availability, display, and merchandising strength of their products, especially in the rapidly growing hypermarkets. They also may benefit by improving in terms of Taiwan Chinese consumers' perceptions of their advertisements as a believable and reliable source of product information, although at the present time, no significant differences appear to be perceived by consumers between U.S. and Japanese marketers of appliances in this regard. A closer comparison

of results for the two analysis groups in the study shows that the product-country image for U.S.-made appliances was noted to be more favorable (4.291) than that for their Japanese counterparts (4.088), and the difference was statistically significant ($p < .05$). This advantage in terms of overall product-country image (e.g., prestige, workmanship, technological innovation, etc.) for U.S.-made appliances, in spite of their late market entry into Taiwan, comparatively limited retail distribution and greater cultural distance from Taiwan, is an important source of competitive strength for U.S. marketers in marketing to Taiwan Chinese consumers.

Limitations and Future Research

As with any empirical research, this study has its strengths and weaknesses. While the synthesis of several key constructs considered in past country-of-origin studies into an integrated model is a major strength of the study, generalizability of the results requires a replication of the study. In the current study, only one of the constructs was unique to Taiwan Chinese consumers. Even the "traditional Chinese cultural values orientation" construct can be modified meaningfully to be applicable to other cultures. Thus, it may be worthwhile to replicate the present study with other products beyond refrigerators, and in other countries, including the People's Republic of China.

Another limitation of this study is the cross-sectional nature of its data collection and analysis. International markets and marketing practices are highly competitive and dynamic. Taiwan Chinese consumers' perceptions of U.S.- and Japanese-made products may undergo shifts over time, as has happened in the case of Finnish consumers' perceptions of U.S. and Japanese consumer products during 1975–1985 (Darling & Wood, 1990). A longitudinal research study in Taiwan (or the PRC) may uncover potential shifts in product-country images and other constructs of the model and/or their interrelationships. As these countries undergo further rapid transformation in opening up their markets, longitudinal studies will facilitate a more accurate understanding of the socio-economic-cultural dynamics of consumers' responses to

foreign products and globalization of the emerging markets. A further possible limitation to the study is generalizability of these results. Therefore, investigation of moderators and replication of this model in the context of other country settings and other categories of products would help determine whether the proposed model is universal or culture or product specific to Taiwan Chinese culture.

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