Online Advertising: A Cross-Cultural Synthesis¹

Yuping Liu-Thompkins, Ph.D.
Fellow, Society for New Communications Research
Associate Professor of Marketing &
E. V. Williams Faculty Fellow
2040 Constant Hall
College of Business and Public Administration
Old Dominion University
Norfolk, VA 23529

Phone: (757) 683-6551 Email: YXXLiu@odu.edu

December 2011

-

¹ Published in 2012 as a chapter of *Handbook of Research on International Advertising*, ed. Shintaro Okazaki, p. 303-324, Cheltenham, UK: Edward Elgar Publishing.

Online Advertising: A Cross-Cultural Synthesis

Introduction

As a new media platform, the Internet has experience phenomenal growth since its inception. In less than twenty years, it has spread from its US origin to all six major continents, claiming an estimated total of two billion users or 30% of the world population as of 2010 (International Telecommunication Union 2010). For developed countries, Internet penetration rates are even higher at an average of 71.6% (International Telecommunication Union 2010). Echoing the quick growth of the Internet, advertisers are increasingly using this medium to reach their target audiences. According to IDC, worldwide spending in online advertising is expected to reach \$106.6 billion in 2011, reflecting an annual growth rate of 15-20% from 2008 (Marketing Charts 2008).

The online channel is especially important in the context of international advertising. When a company posts an advertising message online, the message becomes automatically available to a worldwide audience of Internet users. Indeed, it is not an exaggeration to say that online advertising by definition is international advertising. This has facilitated the globalization of business and has reduced the time, cost, and effort required to reach consumers in other countries. Although the Internet is particularly suitable for international advertising, devising and implementing an effective international advertising strategy through the medium is not a simple decision. Similar to traditional advertising, companies need to answer the questions of whether to standardize or localize their messages across geographic boundaries, how to accommodate the large number of languages spoken by consumers in different countries, and how to remain culturally sensitive and at the same time reach international consumers in a cost-effective fashion. More unique to the online channel, advertisers also need to consider the technology capabilities of individual

consumers in different cultures, address the wants of online consumers that may or may not be representative of their offline counterparts, and deal with a more dynamic environment where distinct cultures are becoming more fluid and diffuse due to increasing globalization.

Addressing these concerns, advertising and marketing researchers have been paying more and more attention to cross-cultural issues in online advertising. Dozens of studies have compared the online advertising practice of companies from different countries of origin (e.g., Cho and Cheon 2005; Singh and Matsuo 2004) as well as the practice of the same multinational companies in different target markets (e.g., Okazaki and Skapa 2008; Shin and Huh 2009). The variables examined ranged from information content, graphics, to other design components of online ads. A more limited number of studies have also examined the reaction of consumers from different countries toward online advertising (e.g., Ko, Roberts, and Cho 2006; Luna, Peracchio, and de Juan 2003). These studies investigated international consumers' general perception of and attitude toward online advertising, and examined specific elements of an online ad (e.g., language, interactivity, and local customization) that may render the ad more or less effective among an international audience.

To date, there has been limited synthesis of this body of work. Addressing this gap, the current chapter offers a comprehensive review of research on cross-cultural issues in online advertising. By extracting the key debates and findings from existing research, it aims to provide a systematic picture of current knowledge in this area and to identify significant gaps in the literature that can lead to fruitful research in the future. The following sections start by examining the famous standardization vs. localization debate in the unique context of online advertising. Then a set of theoretical and practical factors that can lead to cross-cultural differences in online advertising is discussed. This is followed by a summary of key

findings from this research stream. The chapter concludes with a list of research topics to help guide future research in this area.

Standardization or Localization?

With the Internet emerging as an important advertising channel, the old debate on whether standardization or localization is a better business strategy has resurfaced (Cho and Cheon 2005; Laroche et al. 2001). The universal technology platform that enables consumers around the world to connect to the Internet provides a compelling argument for a standardization approach (Ju-Pak 1999; Laroche et al. 2001). Two consequences flow from the instantaneity and easy accessibility of the Internet. First, it offers companies more ready access to the global market. Previously companies wanting to do business on a global scale need to possess extensive resources to deal with the intermediaries and complicated logistics involved in doing business with consumers in another country. With the Internet, even small companies can establish a website to sell directly to consumers in other countries. This favors a cost-effective standardization approach in online advertising.

Secondly, the Internet also makes access to information much faster and easier for consumers in different countries. This breaks the cultural boundaries that may have kept individual cultures in an isolated state prior to the Internet age. As Johnston and Johal (1999) argue, the global reach of online medium can alter local cultures and help form a global village that fuses cultural values from different countries to create a melting pot of a fluid global culture. Adding to this is the tendency among younger consumers to be early adopters of new technology. As younger consumers are less likely to be deeply rooted in traditional cultural values, these consumers are more likely to embrace global cultures or values that did not originate in their home country (Li, Li, and Zhao 2009; Paek, Yu, and Bae 2009; Shin and Huh 2009). This again favors a standardization approach.

Although the above arguments suggest that online advertising may follow a more standardized approach, industry practice and empirical research findings seem to suggest otherwise. Website localization has quickly grown into a multi-billion dollar industry, within which language services alone are predicted to reach \$25 billion in 2013 (Common Sense Advisory 2011). Comparison of websites and online banner ads across countries also reveals significant cross-cultural differences on at least some content and design elements (e.g., An 2007; Paek, Yu, and Bae 2009; Singh, Kumar, and Baack 2005). Furthermore, studies of online consumers show that Internet users in different countries represent distinct demographic groups and exhibit diverse online behavior (Riegner 2008), and that their response to a marketing website is dependent on elements of their home culture such as language (Luna, Peracchio, and de Juan 2003). From a theoretical perspective, Hofstede (2002) argues that cultures are relatively stable. While cultural practices may change over time, deeply rooted cultural values remain rather steady. Together, these suggest that online advertising is still subject to cultural influences and that consumers in different countries may still require communication messages that are targeted toward their specific culture.

While the debate between standardization and localization is still ongoing, some researchers have adopted a contingency view and argue that the most suitable strategy in a given situation may be dependent on the country-of-origin, product type, target audience, management style, and competition (Shin and Huh 2009). Furthermore, some elements of an online ad such as logo and layout may need to be standardized to maintain a consistent brand image, while other elements such as content and specific visual cues require more localization (Zhao et al. 2003).

This chapter does not intend to support any particular approach. Instead, it contributes to the conversation by summarizing what we have learned from scholarly research in this area. The section below introduces several potential theoretical and practical bases for cross-cultural differences in online advertising. Then building on that, the next sections review empirical findings on cross-cultural differences (or the lack thereof) as reflected in online advertising practice and in consumers' reaction to online advertising.

Bases for Cross-Cultural Differences in Online Advertising

Potential cross-cultural differences in online advertising come from a variety of sources. On one hand, similar to traditional advertising, online advertising may reflect and reinforce the cultural values embedded in a society (Pollay 1986). It may also manifest the desired or idealized values that represent a more dynamic and futuristic view of a culture (Okazaki 2004). These differences in cultural values and views are further combined with variation in communication styles across different countries to create the unique discourse of advertising. On the other hand, as a departure from traditional advertising, online advertising is based on a new technology platform. As some researchers argue, this new medium has the ability to simultaneously change culture as well as make theories and assumptions based on traditional media become obsolete (Gevorgyan and Manucharova 2009; Kim, Coyle, and Gould 2009; Murphy and Scharl 2007). In examining cross-cultural online advertising, therefore, it is important to consider the underlying technology and how it interacts with cultural values and communication styles to define the similarities and differences found in online advertising across different countries. Combining these forces of influence (i.e., cultural values, communication styles, and technology), this section reviews theoretical and practical foundations that are often drawn in online advertising research to explain the differences (or the lack thereof) across cultures.

Cultural Values and World Views

The most commonly used cultural value framework is offered by Hofstede (1980). This framework was formulated based on large-scale surveys of IBM employees across the world. It originally consisted of four dimensions: individualism/collectivism, power distance, uncertainty avoidance, masculinity/femininity. Later, a fifth dimension, short-term/longterm orientation, was added to the framework. Research on the applicability of this classical framework in an online advertising context has shown mixed support so far. In a series of studies, Singh and colleagues examined corporate websites in the US, China, Mexico, Japan, France, and Germany on each of the four original Hofstede dimensions (Singh and Baack 2004; Singh, Hongxin, and Xiaorui 2003; Singh, Kumar, and Baack 2005; Singh and Matsuo 2004). Their results were mostly consistent with the framework. However, uncertainty avoidance repeatedly failed to produce significant difference across websites from different countries. Controversy also exists regarding individualism/collectivism. While Sinkovics, Yamin, and Hossinger's (2007) analysis showed expected findings on indicators of individualism, it also revealed the surprising finding that Latin American websites used fewer collectivistic features than more individualistic countries such as the US, UK, and Germany. Echoing this contradiction, Paek, Yu, and Bae (2009) found that Korean websites contained more individualistic indicators than their US counterparts. Li, Li, and Zhao's (2009) comparison of banner ads in Eastern and Western cultures, on the other hand, showed both country clusters to be more likely to use individualistic appeals, even though Eastern cultures presumably favor collectivism. In another analysis of university websites from eight countries, Callahan (2005) found general support for Hofstede's (1980) framework, but the strength of correlation was rather weak.

Two other cultural value frameworks have also been drawn upon in online advertising research: the monochronic vs. polychronic time orientation proposed by Hall (1976) and the cultural typology by Schwartz (1994). The former concerns the perception and management of time by individuals in a culture, where monochronic cultures tend to view time as a linear progression whereas polychronic individuals view time as a non-linear term and are more likely to engage in multitasking. Research shows that this time orientation can affect online advertising design such as the use of a linear vs. nonlinear navigation structure and the presence of rich media and animated content, which reflects a polychronic orientation (Kim, Coyle, and Gould 2009; Zhao et al. 2003).

Schwartz's (1994) cultural typology represents a more updated cultural value system. It proposes three higher-order dimensions: autonomy vs. embeddedness, egalitarianism vs. hierarchy, and harmony vs. mastery. These three dimensions in turn encompass seven lower-order cultural values: conservation, hierarchy, intellectual autonomy, affective autonomy, competency, harmony, and egalitarian compromise. Schwartz's own validation of the typology (1994) shows a significant correlation between his cultural values and some of Hofstede's dimensions. Applying this model to online advertising, Baack and Singh (2007) concluded that neither Hofstede's or Schwartz's framework is sufficient in explaining crosscultural differences in website design. Instead, the two need to be combined to provide best fit to the data.

Whichever cultural value framework is used, these systems all suffer a common criticism, that they represent a rather static view of national culture and do not consider the dialogue both among cultures brought forth by globalization and within a culture as a result of population diversification. This can be especially problematic in the context of the Internet. As enhanced computer technology facilitates global dialogue among individuals

from vastly different cultures, it results in unique cultural identities that represent a mixture of multiple cultures (Ess and Sudweeks 2005). These identities are highly fluid and amorphous and defy the definition from traditional cultural value frameworks (Würtz 2005). As a result, applying these frameworks indiscriminately ignores such new identities and may result in stereotyped conclusions that are no longer accurate or suitable for consumers participating in online communication. In a comprehensive discussion of the applicability of classical cultural typologies in computer-mediated communication, Hermeking (2005) sets the boundary conditions for the productive use of these typologies. That is, these classical theories are more suitable if the specific consumption activity is driven by an unconscious mentality-based process. In contrast, if the consumption is the result of conscious choice based on individual identity, classical cultural theories would fall short of the more complicated process that is involved in consumer information processing and decision making.

Language and Communication Style

As an important part of daily discourse, online advertising is also bound by the language and communication style of the target audience. Language is perhaps the first consideration for advertisers intending to reach out to consumers in other countries. Early Internet was dominated by the English language. But as more consumers in non-English speaking countries move online, need for information in other languages increases, and it becomes more important for advertisers to decide whether and how to adapt their messages to the native languages of the target audience. Languages can vary considerably on vocabulary, grammatical structure, and scripting system (Hernandez and Minor 2010). This is further complicated by interaction with other design elements in an ad, product type, country-of-origin, and individual consumers' cognitive capacity at the time of ad exposure

(Luna, Peracchio, and de Juan 2003; Warden, Lai, and Wu 2002). As a result, the modifications needed for proper language adaptation can go way beyond simple translation to reflect the more nuanced differences across languages (Fletcher 2006).

Besides language, how people within a certain culture communicate with each other can also lead to cross-cultural differences in online advertising. The most cited framework in this area is the high- vs. low-context communication styles proposed by Hall (1976). Eastern cultures such as China, Japan, and Korea are generally believed to engage in high-context communication, whereas Western cultures such as the US and UK tend to follow a low-context communication style. The two styles differ in terms of how direct a communication is and how much meaning is derived from the actual message itself vs. other contextual cues such as symbols, social norms, and implicit knowledge about the communicating entities.

Research shows that these differences can have a significant impact on the content as well as design elements of online ads (e.g., An 2007; Paek, Yu, and Bae 2009; Singh and Matsuo 2004). It should be pointed out that although Hall's (1976) model has been frequently used, it is mostly based on qualitative studies of a limited number of countries. This reduces the operational usefulness of the framework and requires additional in-depth qualitative observations of those other cultures before it can be applied empirically (Hermeking 2005).

Technological Development Levels

One unique aspect of online advertising is that it builds on a relatively new technology platform that only emerged in the last two decades. Currently, there is still significant difference in Internet penetration rate across the world, both as a result of varying economic and technological infrastructure among nations and as a result of different consumer cultures (Fletcher 2006). This difference in Internet penetration has several important implications for online advertising. First, Internet penetration rate

determines the size of the target market that can be reached via online advertising. As a result, online advertising may be applicable to a different extent in different countries.

Second, countries at various stages of Internet development also have different cohorts of Internet users. For countries that are still at relatively early stages of Internet development, online consumers consist mainly of early adopters who tend to be younger, more affluent, highly educated, and more innovative. As Internet penetration rate increases, however, online consumers become more representative of the general population and shift toward the population mean when it comes to demographic and psychographic traits.

Finally, the Internet development level in a country also determines the maturity of online business and subsequently online advertising in that country. Advertisers in newly online countries may still be exploring best ways to communicate with their consumers through the new channel, whereas companies in more technologically advanced countries tend to face more intense competition online and to be more developed and experienced in online advertising strategy and tactics.

With only a few exceptions, most published studies in online advertising compared cultures without taking technological development variation into consideration. Researchers assume that any difference discovered would be a result of cultural value or communication style variations. But without controlling for the technological development level in each country, this conclusion may be misleading. It is possible that the aforementioned consequences from varying Internet penetration rates may be the actual drivers of the differences found instead. This is an issue that needs to be addressed in future research.

Cross-Cultural Differences as Reflected in Advertising Practice

Having discussed the theoretical and practical bases for cross-cultural differences in online advertising, this and the next sections summarize empirical research findings in this

area. In the literature, a large number of empirical studies examined online advertisers' practices using the well-established content analysis approach. They typically compare online ads from multiple countries to infer cultural differences (or the lack thereof) reflected in advertising. The findings from this stream of research can be broadly categorized into two areas: information content and creative strategy. The former pertains to *what* is being said in an ad, such as general informativeness, information cues, and types of claims used. The latter relates to *how* things are said, as reflected by the use of symbols, colors, photographs, spokespersons, and other executional and media elements such as ad positioning.

Information Content

A natural question to ask about the information content of an ad is how much information is provided in the ad. Two cultural values provide the basis for this discussion. First is Hofstede's (1980) uncertainty avoidance dimension. Presumably consumers' desire to avoid uncertainty would prompt advertisers to provide more information to reduce the perceived risks associated with the product. The other reasoning comes from the high vs. low context of a culture as suggested by Hall (1976). In high-context cultures, meanings are often derived from contextual elements outside of a message itself. As a result, the amount of information provided in an ad becomes less critical than in a low-context culture, where the message itself provides most if not all meanings to be conveyed.

Interestingly, the above two cultural factors often lead to opposite predictions for a particular culture. Many Eastern cultures such as Japan and Korea are considered high-context cultures, which would lead to low informativeness in online ads. At the same time, these countries also score high on uncertainty avoidance compared with Western cultures such as the US, which would predict a high level of informativeness. This contradiction is reflected in the empirical findings. Consistent with predictions from a high/low context

perspective, two early studies in this area found US companies' websites and banner ads to be more informative than those from Korea (Chung and Ahn 1999; Oh, Chang-Hoan, and Leckenby 1999). Some researchers, however, found no such difference among the US, UK, and Korea (Ju-Pak 1999; Yoon and Cropp 1999). More recent analyses further show that countries on the extreme ends of the two cultural dimensions (US and Japan) featured more informative online ads than did a country in a more moderate range (Spain; Okazaki 2004).

To examine the specific types of information provided in online ads, researchers frequently used Resnik and Stern's (1977) information classification system as the analysis tool (Chung and Ahn 1999; Okazaki and Rivas 2002; Pashupati and Lee 2003). The system identifies 14 types of information cues: price-value, quality, performance, components or contents, availability, special offer, taste, nutrition, packaging or shape, guarantees or warranties, safety, independent research, company-sponsored research, and new ideas. Across studies, quality and performance cues were frequently found in online ads no matter the country of origin. The presence of other information cues is less consistent across studies, however, possibly due to the varying mixture of product types represented by each study's sample (Ju-Pak 1999). Two content analyses of Japanese multinational companies' websites found that these companies' domestic websites in Japan are more likely to use price-value cues than their adapted versions in the US and Spain (Okazaki 2004; Okazaki and Rivas 2002). Ju-Pak's (1999) comparison of 310 websites from the US, UK, and Korea found that US websites are more likely to provide price and promotion-related cues than both UK and Korean websites. In a rare study of online advertising in India, Pashupati and Lee (2003) concluded that banner ads on Indian newspaper websites are more likely to feature price and explicit descriptions of the product or service than their Korean counterparts.

Creative Strategy

As creative strategy involves a wide range of decisions, it is impossible to cover all cross-cultural differences in creative strategy here. Instead, this section will focus on one aspect of creative strategy that is unique to online advertising: interactivity. A high level of interactivity is considered a key feature that separates online advertising from advertising in the traditional media (Liu and Shrum 2002). A website can incorporate interactive features (e.g., customization, hyperlinks, feedback form, etc.) that offer visitors more personal control over their browsing experience and engage them in a synchronous two-way dialogue. Yoon and Cropp (1999) and Ju-Pak (1999) were the first ones to examine interactivity in a cross-cultural setting. Comparing Western and Korean websites, Yoon and Cropp (1999) did not find any significant difference between their US and Korean samples on the use of interactive features, whereas Ju-Pak's (1999) results revealed a higher level of interactivity in Korean websites than their US and UK counterparts. Supporting the latter finding, Kim, Coyle, and Gould's (2009) analysis of 101 Korean websites and 99 US websites showed that Korean websites are more likely to use clickable images, pull-down bars, and hyperlinks. They argue that, as interactive features require active participation and manipulation from a user, they are more likely to be used in cultures that have a polychronic time orientation such as Korea (Hall 1976).

Drawing on the cultural values of individualism/collectivism and power distance, Cho and Cheon (2005) argue that the popularity of an interactive feature depends on the type of interactivity that it represents. Comparing the top 50 advertisers' websites in the US, UK, Japan, and Korea, they found that websites in the US and UK are more likely to emphasize consumer-message interaction and consumer-marketer interaction. Websites in Korea and Japan, in contrast, are more likely to feature consumer-to-consumer interaction,

presumably because of the collectivistic nature of these Eastern cultures. In line with these findings, Zhao et al. (2003) found that US websites are more likely to use personalization than their Chinese counterparts, due to the more individualistic nature of American culture.

Two other studies suggest differences in the use of interactive features even within Western cultures. Okazaki (2005) compared the similarity of top US brands' websites in the US, UK, France, German, and Spain markets and found the similarity level to be fairly low when it comes to the use of interactive features. In a more recent study, Voorveld, Neijens, and Smit (2010) found that the US version of top 100 global brands' websites contained more interactive features than the Dutch version of these websites. This was true for all three dimensions of interactivity: active control, two-way communication, and synchronicity. Such differences among Western countries may reflect both cultural differences and the development level of technology and online advertising in each country.

Methodology Issues

In reviewing the dozens of content analysis studies, it is important to recognize a few methodological choices that may affect the interpretation of some research findings. First, when creating the sample for a study, researchers often followed one of two approaches: inter-firm sampling and intra-firm sampling. In the former approach, researchers select a separate group of companies in each country based on some criteria (e.g., top 100 advertisers), and then compare these groups' online advertising practices (e.g., Cho and Cheon 2005; Singh and Matsuo 2004). The intra-firm sampling approach, in contrast, follows the same group of companies in each country and compares their practices across different target markets (e.g., An 2007; Voorveld, Neijens, and Smit 2010). One potential issue with the inter-firm sampling approach is different sample compositions across countries. For instance, one sample may contain more physical products, and another may have more

service goods. As previous literature suggests, advertising practices are often adjusted according to the industry, product category, and market conditions (Abernethy and Franke 1996; Sinkovics, Yamin, and Hossinger 2007). As a result, the differences discovered among cultures may in fact be caused by the various types of companies involved. Supporting this view, Ju-Pak (1999) found that, after controlling for product category, some differences in the use of informational cues among US, UK, and Korean websites were no longer significant. Shin and Huh (2009) further show that the extent of standardization in online advertising may be dependent on whether the focal product is durable or non-durable goods and whether the product is targeted toward businesses or consumers. Therefore, when using the inter-firm approach, care should be taken to control for product category and industry differences across the samples in various countries.

Second, the unit of analysis may also affect the depth of differences found in a study. With the exception of a few studies that examined banner ads, most researchers content analyzed corporate websites. Some researchers further chose to focus only on the homepage of each website because of the vast amount of information on websites that is often embedded in deep layers of site hierarchy (e.g., Callahan 2005; Gevorgyan and Manucharova 2009; Yoon and Cropp 1999). While this level of analysis remains consistent across samples, it does limit the depth of information captured by the analysis. Similar to banner ads, the homepage of a website contains limited informational and creative cues and may not fully represent the cultural differences that may be revealed throughout the entire website. Furthermore, as the homepage represents the entry way or "face" of a company's website, branding is likely to be a key communication goal. As a result, cultural differences may be sacrificed to ensure consistency in brand image conveyed across

different target countries' websites. This could lead to smaller cultural difference than if entire websites had been analyzed.

Finally, the specific variables and coding scheme used in a study can influence the conclusions drawn from the study. For instance, some researchers attempted to verify the relevance and validity of Hofstede's (1980) cultural value framework in the online advertising context (e.g., Baack and Singh 2007; Singh and Matsuo 2004; Sinkovics, Yamin, and Hossinger 2007). A few studies concluded that the uncertainty avoidance dimension was not sufficiently reflected in cross-cultural website design (Baack and Singh 2007; Singh, Kumar, and Baack 2005; Singh and Matsuo 2004), and Paek, Yu, and Bae (2009) further found no difference between US and Korea websites on collectivism. However, these may simply be an artifact of the features used to code each cultural value. In other words, there may be other informational and executional cues not included in the coding scheme that would have reflected a significant difference in uncertainty avoidance or collectivism across countries. A more unified and comprehensive coding scheme needs to be developed in future research, possibly first through qualitative methods, to increase the validity and reliability of such instruments.

Cross-Cultural Differences from Consumers' Perspective

Although content analysis of online ads is useful in understanding how advertising practices differ across cultures, it does not consider consumer response to these practices. A popular practice discovered through content analysis does not mean that the practice is necessarily effective in persuading consumers. To this end, some other studies have examined the reaction to online advertising from consumers in different cultures. This section reviews the key findings from these studies, starting with consumers' general

attitude toward online advertising followed by consumer response to specific executional strategies in online ads.

Attitude toward Online Advertising

Lutz (1985) defines attitude toward advertising as "a learned predisposition to respond in a consistently favorable or unfavorable manner to advertising in general" (p.52). This general attitude toward advertising can drive a consumer's response to a specific ad, such that a more positive attitude toward advertising in general is likely to make the consumer more receptive to a specific ad. Applied to the current context, consumers from different cultures may possess variable attitude toward online advertising, which in turn can affect their reaction to specific online advertising implementations.

Several studies indeed point to systematic differences among cultures in general response to online advertising. Through a survey of 200 Korean college students and 218 American college students, An and Kim (2007) found that both groups possessed a rather negative attitude toward online advertising. However, this is more so for American students than for Korean students. Choi, Huang, and McMillan's (2008) comparison of a similar college student sample suggests that this may be contingent on the specific medium through which online ads are delivered. Focusing specifically on mobile advertising, these researchers showed the opposite finding that US college students felt more positive toward advertising than Korean students. Comparing consumers from US, China, and Romania, Wang and Sun (2010) concluded that Romanian consumers had more positive attitude toward online advertising than both US and Chinese consumers.

Möller and Eisend (2010) attempted to generalize these differences to a large number of cultures and to associate the differences to Hofstede's (1980) cultural framework.

Their survey of 7775 consumers from 34 countries revealed that individualism led to more

negative attitude toward banner advertising. Uncertainty avoidance, power distance, and masculinity, on the other hand, were associated with more positive attitude toward banner advertising. More importantly, their results suggest that, when it comes to individual attitude toward banner advertising, country-level factors explained a majority of the variance (63.15%), and individual-level factors such as age, gender, and Internet experience explained only .6% of the variance. This points to the importance of considering culture-of-origin when examining consumers' response to online advertising.

Not only do cultures vary on consumers' general attitude toward online advertising, but they also differ on what drives attitude. Four drivers, perceived informational and entertainment values, perceived credibility, and irritation, have been examined in multiple studies (e.g., Lee and Choi 2005; Wang and Sun 2010). Consumers from different cultures were found to hold varying perceptions of online advertising along these dimensions. For instance, US consumers perceived higher informational value in online ads than Korean consumers (An and Kim 2007; Choi, Hwang, and McMillan 2008), reflecting the low-context nature of American culture and as a result US consumers' higher motivation to seek information in a message (Ko, Roberts, and Cho 2006). More interestingly, the impact of these drivers on attitude toward online advertising varies across cultures. For US consumers, information is the dominant driver, whereas credibility carries the most important influence among Korean consumers (An and Kim 2007). This latter difference may be attributed to the tendency to avoid uncertainty in the Korean culture. Within the realm of mobile advertising, Choi, Hwang, and McMillan (2008) found that entertainment value and credibility are the dominant drivers in both the US and Korea. However, information value had a significant impact on attitude toward mobile advertising only for the US sample, again suggesting a higher need for information among US consumers. It is worth noting that, in accounting for

attitude toward online advertising, the four drivers explained significantly more variance for the US sample (62%) than for the Korean sample (36.2%) in An and Kim's (2007) study. The gap was not as big in Choi, Hwang, and McMillan's (2008) study, but it still showed the same direction of difference (71% for US consumers and 60% for Korean consumers). These findings suggest that, in applying standard advertising theories and models developed based on Western cultures to other cultures, researchers may be missing important factors that are unique to those other cultures. From this perspective, a culture-specific emic approach needs to be used in future research (Fletcher 2006).

Response to Specific Online Advertising Implementations

To date, there has been very limited cross-cultural research on consumers' response to specific online advertising implementations, possibly due to the logistic difficulty of constructing valid experimental stimuli and coordinating controlled experiments in multiple countries. The handful of published studies in this area have focused on two questions: does cultural customization lead to more positive consumer response to an online ad? And relatedly, what is the effect of language on consumers' response to online ads?

Cultural Customization Effect. In a study involving 250 consumers from Taiwan, Brazil, and Germany, Singh et al. (2006a) exposed each participant to nine international websites from American and Japanese multinational corporations. Their results show that consumers' perceived level of cultural customization in a website positively affected their perceived ease of use of the website and their attitude toward the website. This effect was especially salient for Taiwanese consumers. The limitation of this study is that it linked two self-reported perception measures, which could be affected by common method bias.

Addressing this limitation, Singh et al. (2006b) associated consumer response with a website's cultural customization score derived from a separate content analysis. They found

that websites with a high cultural customization score led to more positive attitude and higher purchase intention than both websites with a low cultural customization score and websites that were not culturally customized at all.

As cultural customization of an online ad can be implemented in various ways, a few studies focused on more specific customization approaches. In a comparison between US and Chinese consumers, Gevorgyan and Manucharova (2009) found that Chinese consumers responded more positively to website features that reflect collectivism than features that reflect individualism, consistent with the more collectivistic nature of Chinese culture. The opposite was true for American consumers, where individualistic features were viewed more favorably than collectivistic features. Also focusing on individualism/collectivism, Sia et al. (2009) examined two different endorsement approaches: one through affiliation with a well-known online portal (Yahoo!) and the other through testimonials from other consumers. They considered the former an out-group reference and as a result likely to be preferred more in an individualistic culture, whereas the latter represents an in-group reference, favored by a collectivistic culture. Supporting their hypotheses, the effect of portal affiliation on trust perception was stronger for their Australian sample than for the Hong Kong sample, whereas the reverse was true for the effect of peer endorsement.

In a unique study that examined not the visible implementation of cultural customization but the behind-the-scene designer of a website, Faiola and Matei (2005) found that consumers were able to use a website more efficiently if the website was designed by someone from their home culture than if the website was designed by someone from a foreign culture. They argue that a designer's work is affected by his or her cultural background. Consequently, a website from a designer of one's home culture is more likely to be congruent with one's cognitive schema, which explains improved performance.

However, their results also show that this congruency does not affect the quality perception of information on the website.

Although studies in this area seem to point to the superiority of cultural customization, it is worth noting that a simple standardized message may have universal appeals across cultures. For instance, Hynes and Janson (2007) conducted in-depth interviews to investigate consumer reaction to two online cellphone ads, one from Nokia and one from Ericsson. Across consumers from a diverse group of cultures, including US, Taiwan, China, and India, the simpler and cleaner ad from Nokia, which merely showed a phone image, was considered more appealing and effective. This points to the possibility of an effective standardized online message, especially if the message is kept relatively simple and uses universal appeals.

customization. One may naturally assume using a consumer's native language to be more effective in online advertising, as processing one's native language requires less cognitive resource, hence leaving more resources for processing the actual advertising message. Even for proficient bilingual consumers, their cognitive schema and emotions tend to be shaped more strongly by their first language (Luna, Peracchio, and de Juan 2003; Nantel and Glaser 2008). As a result, these consumers may still respond better to messages delivered in their first language. In line with these views, Chen et al. (2009) show that both Taiwanese and Thai consumers reported more positive attitude toward a website in their local language than to a standardized English website. In another study, Nantel and Glaser (2008) find that this preference for one's first language is persistent even for the language in which a website was originally conceived and which is unknown to consumers. They compared 204 Canadian consumers' response to a website originally designed in French versus a website

originally designed in English. Their results suggest that English-speaking Canadian consumers found the website originally designed in English to be more user-friendly than the one designed in French and then translated into English. For French-speaking Canadians, they preferred the website originally designed in French than the one that was translated from English to French.

While there seems to be a general preference for one's native language, a few studies show that the exact effect may be contingent on the outcome measure used and on other executional elements of an ad. For the Nantel and Glaser (2008) study above, although usability ratings of the two websites differed, there was no significant difference in perceived quality of offers on the two websites. The researchers attributed this to the fact that language plays a less important role in quality perception. In one of the most in-depth studies on language effects in online advertising, Luna, Peracchio, and de Juan (2003) challenged the notion that first language is always preferred to second language. Drawing on the resource matching theory, they argue that, under certain conditions, messages presented in one's first language may be too unchallenging and therefore may be less preferred than messages in a second language. In two lab experiments, these researchers show that when the graphics on a website were related to the content of the website (i.e., lower cognitive effort required), using the second language led to more positive attitude toward the website and the product than using the first language. The reverse was true when the graphics were not related to the website copy (i.e., higher cognitive effort required). These findings suggest an interaction between language and other design elements of an online ad, which may dilute or accentuate consumers' response to a specific language.

Future Research Questions

From the above discussion, it is clear that advertising scholars have made significant progress in understanding cross-cultural differences in online advertising. At the same time, it is obvious that the field is far from being mature and many questions remain to be answered. Plenty of conflicting results still exist and need to be resolved, and methodological issues in existing studies also threaten the validity of existing research findings. In introducing a special issue of *Journal of Advertising* on international advertising, Taylor (2005) pointed out significant gaps in the literature that need to be filled by future research. Many of the same issues also apply to cross-cultural online advertising research. To further our knowledge in this area, this section suggests four topics that especially deserve attention in future research.

First, similar to the predominant use of content analysis in studying international advertising in traditional media (Taylor 2005), a large number of studies on cross-cultural online advertising have also been based on content analysis. Although this approach represents a useful exploratory observation of cross-cultural differences, it has a number of limitations. One key limitation is its inability to tell whether the differences discovered indeed reflect consumer preference. Another limitation is that it only demonstrates the outcome of advertisers' decisions without an understanding of the behind-the-scene processes that led to such differences. Are the cross-cultural differences discovered through content analysis an advertiser's conscious choice? Or do they merely reflect unconscious influence from the advertiser's cultural background that may or may not be optimal from a strategic perspective? As research in this area matures, researchers need to move beyond content analysis to examine specific consumer response to cross-cultural online ads as well as advertisers' decision-making process when reaching global markets.

Second, while most existing studies point to the superiority of a localization approach, they do not consider the high cost associated with localization. Does the gain in consumer attitude and intentions translate into incremental purchases that can compensate for the high cost? At least two studies reviewed in this chapter seem to suggest otherwise. They show that, although cultural customization by using a designer from one's home country (Faiola and Matei 2005) or by adapting the language (Nantel and Glaser 2008) may improve consumer interaction with the website, it does not affect consumers' judgment of the quality of information or offers on the website. Luna, Peracchio, and de Juan's (2003) research further concludes that using a non-native language can be more effective if it is properly coordinated with other elements in an online ad. These findings point to a need to better understand the behavioral and financial impact of cultural customization on consumers in different countries. What is the proper tradeoff between higher cost and more positive consumer response? What is the ROI associated with cultural customization in online advertising? When is cultural customization optimal and when is it unnecessary?

Third, from a practical standpoint, cultural customization can be implemented in many ways, such as through language adaptation, using the target culture's symbols and images, and modifying message content and emotional appeals. These approaches may differ in cost as well as level of cultural sensitivity and impact. None of the existing studies has compared the relative effectiveness of different cultural customization approaches. This deserves more attention in future research so as to guide advertisers in making sound decisions when reaching out to the global marketplace. Existing studies also suggest potential moderating effects from other ad design elements and from product type, company background, and market conditions (Luna, Peracchio, and de Juan 2003; Shin and Huh 2009). Future research needs to explore these interactions to identify the best

approach in a given situation. Relatedly, most published studies in this area have focused on corporate websites. Although website is an important part of online advertising, there are many other choices such as banner advertising, search engine advertising, and more recently social media advertising. These advertising forms allow different amount of information to be delivered and target consumers at different stages of the decision making process. A better understanding of how each of these forms should be adapted or standardized in an international context is needed.

Finally, from a theoretical perspective, most existing studies in this area have drawn upon classical cultural frameworks such as Hofstede (1980) and Hall (1976) as the theoretical foundation. However, culture is a dynamic entity and is bound to evolve over time. This is especially a concern for online advertising, as the common Internet platform and easier and faster information access have fostered more interaction among cultures and have potentially led to cultural fusion especially among younger generation of consumers. Classical theories and frameworks developed based mostly on Western cultures may have diminished value in such a context. Already, a few studies show that existing theories accounted for significantly less variance in the data from Eastern cultures than those from Western cultures (An and Kim 2007; Choi, Hwang, and McMillan 2008; Sia et al. 2009). Future research needs to follow a more grounded and emic approach to understand how online consumers from different cultures think, feel, and behave. This will bring more accurate knowledge of the new generation of consumers that literally grew up with the Internet, especially those from non-Western cultures.

As Internet technology evolves, online advertising will continue to play a critical role in companies' advertising strategies. As an inherently global medium, it is important to understand how this channel can be utilized effectively and efficiently to reach consumers

around the world. Advertising scholars have started to address some key theoretical and practical questions, but much remains to be done. With a better understanding of how consumers from different cultures interact with each other and with advertisers online, this stream of research will eventually contribute back to the broader international advertising literature and reveal how technology shapes advertising and cultural processes.

References

Abernethy, Avery M. and George R. Franke (1996), 'The Information Content of Advertising: A Meta-Analysis,' *Journal of Advertising*, **25** (2), 1-17.

An, Daechun (2007), 'Advertising Visuals in Global Brands' Local Websites: A Six-Country Comparison,' *International Journal of Advertising*, **26** (3), 303-332.

An, Daechun and Sang Hoon Kim (2007), 'A First Investigation into the Cross-Cultural Perceptions of Internet Advertising: A Comparison of Korean and American Attitudes,' *Journal of International Consumer Marketing*, **20** (2), 49-65.

Baack, Daniel W. and Nitish Singh (2007), 'Culture and Web Communications,' *Journal of Business Research*, **60** (3), 181-188.

Callahan, Ewa (2005), 'Cultural Similarities and Differences in the Design of University Web Sites,' *Journal of Computer-Mediated Communication*, **11** (1), 239-273.

Chen, Jengchung Victor, William H. Ross, David C. Yen, and Lerdsuwankij Akhapon (2009), 'The Effect of Types of Banner Ad, Web Localization, and Customer Involvement on Internet Users' Attitudes,' *CyberPsychology & Behavior*, **12** (1), 71-73.

Cho, Chang-Hoan and Hongsik John Cheon (2005), 'Cross-Cultural Comparisons of Interactivity on Corporate Web Sites,' *Journal of Advertising*, **34** (2), 99-115.

Choi, Yung Kyun, Jang-Sun Hwang, and Sally J. McMillan (2008), 'Gearing up for Mobile Advertising: A Cross-Cultural Examination of Key Factors That Drive Mobile Messages Home to Consumers,' *Psychology & Marketing*, **25** (8), 756-768.

Chung, Hwi-Man and Euijin Ahn (1999), 'A Content Analysis of Internet Banner Advertising: Focusing on Korean and U.S. Cultural Differences,' paper presented at Proceedings of the Annual Meeting of the Association for Education in Journalism and Mass Communication Vol. 82. New Orleans, LA: Association for Education in Journalism and Mass Communication, pp.56-85.

Common Sense Advisory (2011), 'Facts and Figures: Language Services Market', http://www.commonsenseadvisory.com/Resources/FactsandFigures.aspx, accessed February 2, 2011.

Ess, Charles and Fay Sudweeks (2005), 'Culture and Computer-Mediated Communication: Toward New Understandings,' *Journal of Computer-Mediated Communication*, **11** (1), 179-191.

Faiola, Anthony and Sorin A. Matei (2005), 'Cultural Cognitive Style and Web Design: Beyond a Behavioral Inquiry into Computer-Mediated Communication,' *Journal of Computer-Mediated Communication*, **11** (1), 375-394.

Fletcher, Richard (2006), 'The Impact of Culture on Web Site Content, Design, and Structure,' *Journal of Communication Management*, **10** (3), 259-273.

Gevorgyan, Gennadi and Naira Manucharova (2009), 'Does Culturally Adapted Online Communication Work? A Study of American and Chinese Internet Users' Attitudes and Preferences toward Culturally Customized Web Design Elements,' *Journal of Computer-Mediated Communication*, **14** (2), 393-413.

Hall, Edward T. (1976), Beyond Culture. New York: Anchor Books.

Hermeking, Marc (2005), 'Culture and Internet Consumption: Contributions from Cross-Cultural Marketing and Advertising Research,' *Journal of Computer-Mediated Communication*, **11** (1), 192-216.

Hernandez, Monica D. and Michael S. Minor (2010), 'Consumer Responses to East-West Writing System Differences,' *International Marketing Review*, **27** (5), 579-593.

Hofstede, Geert (1980), *Culture's Consequences: International Differences in Work-Related Values*. Thousand Oaks, CA: Sage Publications.

Hofstede, Geert (2002), 'Dimensions Do Not Exist: A Reply to Brendan Mcsweeney,' *Human Relations*, **55** (11), 1355-1361.

Hynes, Geraldine E. and Marius Janson (2007), 'Global Imagery in Online Advertisements,' *Business Communication Quarterly*, **70** (4), 487-492.

International Telecommunication Union (2010), 'The World in 2010: Ict Facts and Figures,' (accessed February 13, 2011), [available at http://www.itu.int/ITU-D/ict/material/FactsFigures2010.pdf].

Johnston, Kevin and Parminder Johal (1999), 'The Internet as a "Virtual Cultural Region": Are Extant Cultural Classification Schemes Appropriate?,' *Internet Research*, **9** (3), 178-186.

Ju-Pak, Kuen-Hee (1999), 'Content Dimensions of Web Advertising: A Cross-National Comparison,' *International Journal of Advertising*, **18** (2), 207-231.

Kim, Heeman, James R. Coyle, and Stephen J. Gould (2009), 'Collectivist and Individualist Influences on Website Design in South Korea and the U.S.: A Cross-Cultural Content Analysis,' *Journal of Computer-Mediated Communication*, **14** (3), 581-601.

Ko, Hanjun, Marilyn S. Roberts, and Chang-Hoan Cho (2006), 'Cross-Cultural Differences in Motivations and Perceived Interactivity: A Comparative Study of American and Korean Internet Users,' *Journal of Current Issues & Research in Advertising*, **28** (2), 93-104.

Laroche, Michel, V. H. Kirpalani, Frank Pons, and Lianxi Zhou (2001), 'A Model of Advertising Standardization in Multinational Corporations,' *Journal of International Business Studies*, **32** (2), 249-266.

Lee, Wei-Na and Sejung Marina Choi (2005), 'The Role of Horizontal and Vertical Individualism and Collectivism in Online Consumers' Responses toward Persuasive Communication on the Web,' *Journal of Computer-Mediated Communication*, **11** (1), 317-336.

Li, Hairong, Ang Li, and Shuguang Zhao (2009), 'Internet Advertising Strategy of Multinationals in China,' *International Journal of Advertising*, **28** (1), 125-146.

Liu, Yuping and L. J. Shrum (2002), 'What Is Interactivity and Is It Always Such a Good Thing? Implications of Definition, Person, and Situation for the Influence of Interactivity on Advertising Effectiveness,' *Journal of Advertising*, **31** (4), 53-64.

Luna, David, Laura A. Peracchio, and María Dolores de Juan (2003), 'The Impact of Language and Congruity on Persuasion in Multicultural E-Marketing,' *Journal of Consumer Psychology*, **13** (1/2), 41-50.

Lutz, Richard J. (1985), 'Affective and Cognitive Antecedents of Attitude toward the Ad: A Conceptual Framework,' in *Psychological Processes and Advertising Effects*, Linda Alwitt and Andrew Mitchell, eds. Hillsdale, NJ: Lawrence Erlbaum Associates, pp.45-63.

Marketing Charts (2008), 'Worldwide Internet Advertising Spending to Surpass \$106 Billion in 2011', http://www.marketingcharts.com/television/worldwide-internet-advertising-spending-to-surpass-106-billion-in-2011-5068/, accessed February 13, 2011.

Möller, Jana and Martin Eisend (2010), 'A Global Investigation into the Cultural and Individual Antecedents of Banner Advertising Effectiveness,' *Journal of International Marketing*, **18** (2), 80-98.

Murphy, Jamie and Arno Scharl (2007), 'An Investigation of Global Versus Local Online Branding,' *International Marketing Review*, **24** (3), 297-312.

Nantel, Jacques and Evelyne Glaser (2008), 'The Impact of Language and Culture on Perceived Website Usability,' *Journal of Engineering & Technology Management*, **25** (1/2), 112-122.

Oh, Kyu-Won, Cho Chang-Hoan, and John D. Leckenby (1999), 'A Comparative Analysis of Korean and U.S. Web Advertising,' paper presented at Proceedings of the 1999 Conference of the American Academy of Advertising, Marilyn S. Roberts (Ed.). Gainesville, FL: American Academy of Advertising, pp.73-86.

Okazaki, Shintaro (2004), 'Do Multinationals Standardise or Localise? The Cross-Cultural Dimensionality of Product-Based Web Sites,' *Internet Research*, **14** (1), 81-94.

Okazaki, Shintaro (2005), 'Searching the Web for Global Brands: How American Brands Standardise Their Web Sites in Europe,' *European Journal of Marketing*, **39** (1/2), 87-109.

Okazaki, Shintaro and Javier Alonso Rivas (2002), 'A Content Analysis of Multinationals' Web Communication Strategies: Cross-Cultural Research Framework and Pre-Testing,' *Internet Research*, **12** (5), 380-390.

Okazaki, Shintaro and Radoslav Skapa (2008), 'Global Web Site Standardization in the New Eu Member States,' *European Journal of Marketing*, **42** (11/12), 1224-1245.

Paek, H., J. Yu, and B. Bae (2009), 'Is on-Line Health Promotion Culture-Bound?,' *Journal of Advertising*, **38** (1), 35-47.

Pashupati, Kartik and Jeng Hoon Lee (2003), 'Web Banner Ads in Online Newspapers:A Cross-National Comparison of India and Korea,' *International Journal of Advertising*, **22** (4), 531-564.

Pollay, Richard W. (1986), 'The Distorted Mirror: Reflections on the Unintended Consequences of Advertising,' *Journal of Marketing*, **50** (2), 18-36.

Resnik, Alan and Bruce L. Stern (1977), 'An Analysis of Information Content in Television Advertising,' *Journal of Marketing*, **41** (1), 50-53.

Riegner, Cate (2008), 'Wired China: The Power of the World's Largest Internet Population,' *Journal of Advertising Research*, **48** (4), 496-505.

Schwartz, Shalom H. (1994), 'Beyond Individualism/Collectivism: New Cultural Dimensions of Values,' in *Individualism and Collectivism: Theory, Method, and Applications*, Uichol Kim and Harry C. Triandis and Cigdem Kagitcibasi and Sang-Chin Choi and Gene Yoon, eds. Thousand Oaks, CA: Sage Publications, pp.85-119.

Shin, Wonsun and Jisu Huh (2009), 'Multinational Corporate Website Strategies and Influencing Factors: A Comparison of Us and Korean Corporate Websites,' *Journal of Marketing Communications*, **15** (5), 287-310.

Sia, Choon Ling, Kia H. Lim, Kwok Leung, Matthew K. O. Lee, Wayne Wei Huang, and Izak Benbasat (2009), 'Web Strategies to Promote Internet Shopping: Is Cultural-Customization Needed?,' *MIS Quarterly*, **33** (3), 491-512.

Singh, Nitish and Daniel W. Baack (2004), 'Web Site Adaptation: A Cross-Cultural Comparison of U.S. And Mexican Web Sites,' *Journal of Computer-Mediated Communication*, **9** (4).

Singh, Nitish, Georg Fassott, Mike C. H. Chao, and Jonas A. Hoffmann (2006a), 'Understanding International Web Site Usage: A Cross-National Study of German, Brazilian, and Taiwanese Online Consumers,' *International Marketing Review*, **23** (1), 83-97.

Singh, Nitish, Georg Fassott, Zhao Hongxin, and Paul D. Boughton (2006b), 'A Cross-Cultural Analysis of German, Chinese and Indian Consumers' Perception of Web Site Adaptation,' *Journal of Consumer Behaviour*, **5** (1), 56-68.

Singh, Nitish, Zhao Hongxin, and Hu Xiaorui (2003), 'Cultural Adaptation on the Web: A Study of American Companies' Domestic and Chinese Websites,' *Journal of Global Information Management*, **11** (3), 63-80.

Singh, Nitish, Vikas Kumar, and Daniel Baack (2005), 'Adaptation of Cultural Content: Evidence from B2c E-Commerce Firms,' *European Journal of Marketing*, **39** (1/2), 71-86.

Singh, Nitish and Hisako Matsuo (2004), 'Measuring Cultural Adaptation on the Web: A Content Analytic Study of U.S. And Japanese Web Sites,' *Journal of Business Research*, **57** (8), 864-872.

Sinkovics, Rudolf R., Mo Yamin, and Matthias Hossinger (2007), 'Cultural Adaptation in Cross Border E-Commerce: A Study of German Companies,' *Journal of Electronic Commerce Research*, **8** (4), 221-235.

Taylor, Charles R. (2005), 'Moving International Advertising Research Forward,' *Journal of Advertising*, **34** (1), 7-16.

Voorveld, Hilde, Peter Neijens, and Edith Smit (2010), 'The Interactive Authority of Brand Web Sites,' *Journal of Advertising Research*, **50** (3), 292-304.

Wang, Ying and Shaojing Sun (2010), 'Assessing Beliefs, Attitudes, and Behavioral Responses toward Online Advertising in Three Countries,' *International Business Review*, **19** (4), 333-344.

Warden, Clyde A., Mengkuan Lai, and Wann-Yih Wu (2002), 'How Worldwide Is Marketing Communication on the World Wide Web?,' *Journal of Advertising Research*, **42** (5), 72-84.

Würtz, Elizabeth (2005), 'Intercultural Communication on Web Sites: A Cross-Cultural Analysis of Web Sites from High-Context Cultures and Low-Context Cultures,' *Journal of Computer-Mediated Communication*, **11** (1), 274-299.

Yoon, Doyle and Fritz Cropp (1999), 'Cultural Differences in Internet Advertising: A Content Analysis of Internet Advertising between the United States and Korea,' paper presented at Proceedings of the 1999 Conference of the American Academy of Advertising, Marilyn S. Roberts (Ed.). Gainesville, FL: American Academy of Advertising, pp.89-96.

Zhao, Wenyong, Brian L. Massey, Jamie Murphy, and Fang Liu (2003), 'Cultural Dimensions of Website Design and Content,' *Prometheus*, **21** (1), 75-84.