University of Huddersfield Repository

Hsu, Cathy H.C. and Song, Hanqun

Destination image in travel magazines: A textual and pictorial analysis of Hong Kong and Macau

Original Citation

This version is available at http://eprints.hud.ac.uk/25702/

http://eprints.hud.ac.uk/

Destination image in travel magazines: A textual and pictorial analysis of Hong Kong and Macau

Abstract

Based on analyses of texts and pictures in the top six outbound travel magazines in Mainland China, this article presents an evaluation of the destination images of Hong Kong and Macau as portrayed in 88 travel articles over a three-year period. The results showed that the projected destination images of Hong Kong and Macau were dominated by attributes related to Culture, history and art and Leisure and recreation. Hong Kong was often described by image attributes such as places and attractions, shopping, cuisine and food, hotels, and the creative industries. For Macau, history and heritage, places and attractions, gambling, cuisine and food, and hotels were the most often reported. During the study period, Hong Kong and Macau witnessed several significant changes in the image attributes featured in both texts and pictures. These changes were partly influenced

by news and events over the period. Implications for destination marketing organizations and directions for future research were suggested.

Introduction

The outbound tourism market of Mainland China (that is, the People's Republic of China) has developed rapidly over the last two decades. In 2011, the number of Chinese tourists going overseas was 70 million, an increase of 22% compared with 2010 (China Tourism Academy, 2012). According to the China National Tourism Administration (CNTA), Hong Kong and Macau were the top two destinations for Mainland Chinese outbound tourists from 2001 to 2010 (CNTA, 2011). In addition, Mainland China was the largest source of visitors to Hong Kong with 28.1 million arrivals, accounting for 67.0% of the total in 2011 (Tourism Commission, 2012). It was also the largest source for Macau with 16.2 million arrivals, accounting for 57.7% of the total in the same year (Macau Government Tourist Office, 2012). The total number of tourist arrivals to Hong Kong and Macau increased tremendously over the three-year period of 2006-2008, from 25.3 million to 29.5 million for Hong Kong representing a 16.6% increase (Hong Kong Tourism Board, 2011) and from 22.0 million to 23.0 million for Macau representing 4.5% growth (Macau Government Tourist Office, 2010). Several new tourist attractions were

developed in both Hong Kong and Macau over the same period. Specifically, the Hong Kong Wetland Park and Ngong Ping 360 both opened in 2006, and in 2008 Hong Kong co-hosted the Beijing Olympic and Paralympic Equestrian Events. In Macau, the Cotai Strip – a casino and tourism project – opened its first casino, the Galaxy Entertainment Grand Waldo Hotel in 2006. The Las Vegas Sands' Venetian Macau, a major milestone for the Cotai Strip, opened in 2007. This was therefore an important period in tourism development for both Hong Kong and Macau.

The media, as one of the most important information sources for tourists (Bieger & Laesser, 2004), can affect people's cognitive and affective responses, and influence their behavioral intentions (Miller, Hadjimarcou, & Miciak, 2000). In the tourism context, media-projected images can arouse the desire to travel to a specific destination (Pan, 2011). Travel magazines, a special medium different from other mass media (such as television and newspapers) or inducing agents (such as promotion, advertising, and travel brochures), are one of the most vital sources of information. In China, travelers regard fashion magazines (including travel publications) as one of the three most important information sources affecting their outbound tourism decisions (Sparks & Pan, 2009).

Given the significance of travel magazines in forming tourists' destination image as well as influencing their future travel behavior, it is necessary to examine the portrayal of destinations in this medium. Before examining the influence of travel magazines on readers' future travel behavior, the images they project should be identified first. An examination of image categories in such magazines could inform future studies of what

image types will arouse travelers' behavior intention most effectively. As a first step, this study set out to examine the portrayal of destination image in popular Chinese travel magazines. Although Hong Kong and Macau are Mainland China's top outbound tourism destinations, studies on their image from a Mainland Chinese perspective are rare. Therefore, the objectives of this study were to: (1) examine the destination image attributes of Hong Kong and Macau as portrayed in textual and pictorial forms in popular Chinese travel magazines, (2) identify changes in the images portrayed over a three-year period, and (3) investigate the image congruency between these textual and pictorial portraits.

Literature Review

Destination image

Destination image refers to a totality of impressions, beliefs, ideals, expectations, and feelings accumulated about a place over time (Kim & Richardson, 2003). Echtner and Ritchie (1993) formalized the concept along the three dimensions of holistic/attribute, functional/psychological, and common/unique-based axes. Echtner and Ritchie's (1993) conceptualization of destination image is one of the most popular typologies, and has been used in many subsequent studies, such as Choi, Chan and Wu (1999), O'Leary and Deegan (2003), and Hui and Wan (2003). However, Echtner and Ritchie (1993) did not offer an extensive list of such image attributes. Some qualitative studies using focus groups, or content analysis, have generated many new ideas that cannot be easily

incorporated into Echtner and Ritchie's (1993) categorization. Many studies, such as Choi, Lehto, and Morrison (2007), Leung, Law, and Lee (2011), and Tang, Choi, Morrison, and Lehto (2009), have analyzed the image data based on researchers' own judgments, rather than Echtner and Ritchie's classification.

The work of Beerli and Martin (2004a; 2004b) provided detailed information about destination image attributes. They presented a framework that includes every aspect of a destination, and classifies attributes into nine categories: Natural resources; General infrastructure; Tourist infrastructure; Tourist leisure and recreation; Culture, history, and art; Political and economic factors; Natural environment; Social environment; and Atmosphere. Natural resources include attributes such as weather, beaches, and the richness of the scenery. General infrastructure includes items such as roads, airports, transport facilities, and health services, while Tourist infrastructure includes hotels, restaurants, ease of access, and tourist centers. Tourist leisure and recreation includes theme parks, entertainment and sports activities, shopping, and casinos. Culture, history, and art comprises museums, historical buildings, festivals, gastronomy, and religion. Political and economic factors cover political stability, economic development, safety, and prices. Natural environment includes the beauty of the scenery and city, pollution, traffic congestion, and overcrowding, while Social environment denotes the friendliness of residents, poverty, and quality of life. Finally, Atmosphere includes family orientation, luxury, exoticism, and relaxation. Many studies have used this categorization to measure destination image (Phau, Shanka, & Dhayan, 2010; Phillips & Jang, 2010; Hsu & Song, 2012), and in doing so have verified the soundness of this framework.

Information sources for destination image

Studies have demonstrated that various information sources serve the function of forming destination images (Baloglu & McCleary, 1999; Gartner, 1993; Hanlan & Kelly, 2005; Mansfeld, 1992; Stern & Krakover, 1993; Woodside & Lysonski, 1989). Information sources examined included professional advice (tour operators, travel agents, and airlines), word-of-mouth (friends, relatives, and social clubs), advertisement (print or broadcast media), and books, movies, or news (Baloglu & McCleary, 1999; Beerli & Martin, 2004a). Media, such as movies, guidebooks, and magazines, have been shown to play an important role in determining tourists' destination image because of their credibility and ability to reach a broad mass of potential tourists (Castelltort & Mader, 2010; Gartner & Shen, 1992; Hanefors & Mossberg, 2002; Kim & Richardson, 2003; Mercille, 2005; Pan, 2011).

Among the eight types of image-formation agents (that is, overt induced I, overt induced II, covert induced I, covert induced II, autonomous, unsolicited organic, solicited organic, and organic) proposed by Gartner (1993), covert induced II comprises familiarization tours for travel writers, which result in an ostensibly-unbiased source with no vested interest in increasing travel to a destination. Autonomous agent denotes independently-produced reports, documentaries, movies, and news articles. Among the diverse travel media, travel magazines could combine covert induced II and autonomous information agents (Govers, Go, & Kumar, 2007). Travel journalism needs to be closely evaluated as

it is highly correlated with both advertising and the travel industry (Fürsich & Kavoori, 2001). Specifically, it is strongly influenced by the public relations efforts of the travel industry and also has a symbiotic relationship with advertising. It is common to see travel being covered in special sections of newspapers, magazines, or television shows, which almost exclusively draw their advertisers from the travel industry (Fürsich & Kavoori, 2001). Moreover, free trips and other inducements for travel journalists are common (Fürsich & Kavoori, 2001), meaning that they face the challenge of managing the demand from different interest groups.

Nowadays, pictures are commonly used in advertising or promotion. Pictures are mostly used to strengthen the texts in promoting the intangible aspects of products to create an attractive impression and generate a pleasurable sensation (Özdemir, 2010). In addition, adding relevant pictorial information to texts can help facilitate information transfer (van der Molen & van der Voort, 2000). Also, pictorial stimuli are recalled more easily and can affect the beliefs and attitudes related to a brand/product, both positively and negatively (MacKay & Fesenmaier, 1997). In a tourism context, the attractiveness of a destination presented in pictures may facilitate tourists in recalling the destination and motivate them to travel (Molina & Esteban, 2006). It has been suggested that pictures should match the content of a travel article (Mendelson & Darling-Wolf, 2009; Pan & Ryan, 2007). The content analysis of pictorial and textual information in travel articles has the potential to provide a great deal of information about the images projected by tourism destinations (O'Leary & Deegan, 2005). After examining the content of travel brochures, Jenkins (2003) concluded that the combination of pictures and texts is

intended to enrich the tourist experience, so the pictures should be carefully chosen to generate the desire to purchase the product. The congruity of texts and pictures in media may enhance viewers' recall, whereas incongruity could impair learning (Brosius, Donsbach, & Birk, 1996; Graber, 1990; van der Molen, 2001). Therefore, it is important to examine whether the content of pictures corresponds to the texts presented in the same media.

Destination image in travel magazines

Previous studies mainly investigated destination image or destination representation in travel magazines, both in print and online, using a content analysis. For the travel magazines in print, Hsu and Song (2012) examined the images of six Chinese outbound destinations, and found that different travel magazines portray these destinations differently, with particular focus on specific image categories. Generally, destination images projected in travel magazines were related to Leisure and recreation, and Culture, history and art. Aramberri and Liang (2012) analyzed 13 European countries as reported in Chinese travel magazines, and found that different travel magazines reported destinations, image icons, people, and human activities differently. With a focus on the three most frequently reported European countries, France, Italy, and Germany, the study found that the popular image categories included Daily life and Contemporary architecture. Bandyopadhyay and Morais (2005) also compared the projected image of India by the North American and Indian media, including travel magazines, and identified both similarities and differences in the projected image in these two countries'

8

media.

In terms of online sources including online travel magazines, Choi et al. (2007) used content analysis to explore the representation of the destination image of Macau. The study concluded that the destination image projected online varied by information sources. Tang et al. (2009) also compared the destination image of Macau on English- and Chinese-language websites including online travel magazines, and showed that overall images projected on English and Chinese websites were different.

<u>Destination image of Hong Kong and Macau</u>

Studies have examined the destination images of Hong Kong and Macau from different perspectives, such as tourists, travel blogs, and websites. Tang, Scherer, and Morrison (2011) compared the image representations of Hong Kong and Macau on the Internet, including online travel magazines. They found that Macau has been highly correlated with cultural attractions and events, and Hong Kong has been depicted as a "modern global metropolis" and shopping paradise. In addition, Choi et al. (1999) observed that tourists grouped Hong Kong's image into four categories: activities and atmosphere, tourist information and shopping, cultural differences, and communication and language. The dominant image of Hong Kong is a "shopping paradise" and metropolitan city with crowds and stress. Its unique image is related to famous attractions such as the Victoria Peak, the Peak Tram, night view from the Peak, and the Victoria Harbor (Choi et al., 1999). Leung et al. (2011) analyzed travel blogs in Mainland China and classified the

image of Hong Kong into five categories: shopping, accommodation, meals outside hotels, transportation, and attractions. After examining the positive and negative images of Hong Kong, they concluded that the city is a superior shopping and sightseeing destination with convenient transportation and a variety of tourist attractions. Products, especially beauty products and cosmetics, and the range of cuisines and foods available in Hong Kong are all of high quality (Leung et al., 2011). Huang and Hsu (2005) also noted that Mainland Chinese perceived Hong Kong as a shopping paradise.

Macau's destination image is strongly associated with gambling (McCartney, 2005). McCartney, Butler, and Bennett (2009) stated that Macau's destination image focuses on gambling opportunities, good nightlife with an adult orientation, and clean and litter free. The uniqueness of Macau includes casinos, the Ruins of St. Paul, and the A-Ma Temple. Choi et al. (2007) examined English texts from Macau's travel-related online media, including the Macau Government Tourist Office website, blogs, magazines, guides, and travel trade information. The top five terms derived from those sources are Portuguese, Chinese, China, Hong Kong, and hotel. According to Tang et al. (2009), the top five terms in Chinese-language travel-related websites describing Macau are sea, gambling, island, religion, and old. They concluded that gambling is a vital image associated with Macau in Chinese blogs; however, it is infrequently used in English blogs. On the official Government website, Macau is projected as a historical city with a focus on cultural heritage. Thus, Macau's destination image mainly focuses on general description in English information sources, but on sightseeing and gaming in Chinese sources (Tang et al., 2009).

Methodology

This study examined the textual and pictorial portrayals of Hong Kong and Macau in several Chinese travel magazines, namely *Voyage, National Geographic Traveler, World Traveler, Traveling Scope, Travel + Leisure,* and *Traveler*. With a focus on outbound tourism, these are China's top six travel magazines, each with an annual circulation of more than 300,000 (Meihua Network, 2009). All are nationally distributed and have much higher circulation than other travel magazines. Data were collected in 2009. As a complete set of publications before 2006 was difficult to obtain due to magazines' short shelf life, magazines published from 2006 to 2008 were used. Only articles about Hong Kong and Macau, excluding advertisements and promotional materials from travel agencies, tour operators, and destinations, were included in the analysis. A total of 88 articles were retrieved (see Table 1), of which 64 were about Hong Kong and 24 on Macau. *Travel + Leisure* had the largest number of articles (22), and both *Traveler* and *World Traveler* the least (11 each).

 (Table 1 here)

The data coding and categorization followed the framework suggested by Beerli and Martin (2004a, 2004b). This was chosen for two reasons: firstly, its categorization has been well developed and refined by several studies evaluating destination image (such as Phau et al., 2010; Phillips & Jang, 2010); and secondly, it has been used by other studies

to measure destination image in media (see for example Hsu & Song, 2012). All article texts were scanned and the images transferred into Word format using SQL software. These Word files were proofread and amended to ensure data accuracy as some Chinese characters were not correctly recognized by the software. The texts were then analyzed using NVivo 8. Firstly, individual Chinese characters were identified with the assistance of the word query function. Some meaningless conjunctions were deleted from the coding. Secondly, after checking the meanings of the retained characters and reviewing the original textual data, a list of most popular words and expressions was derived. Due to the length of this list, the researchers consolidated some of the words into general terms. For instance, bungee jumping, golfing, and yoga were combined as sports; Hong Kong Dollars, RMB, and credit cards as currency; scenery, landscape, and ocean scenery as scenery; and places and attractions, such as Kowloon, Causeway Bay, and the Ruins of St. Paul, as place and attraction. Finally, the words and expressions in the top 100 list were used as image attributes. All data coding was based on the Chinese texts to ensure that the Chinese image attributes fitted the nine destination image categories. This coding was undertaken by a researcher fluent in Chinese and English. During the process, this and a senior researcher undertook three rounds of discussion on some of the image attributes, which ensured the credibility of the data coding. In addition, the attributes were translated from Chinese to English. In order to ensure the translation equivalence, discussions between two researchers proficient in both Chinese and English were held to generate the final English list of image attributes.

For the pictures, the coding scheme was based on Beerli and Martin's (2004a, 2004b) image categorization, and the results generated from the textual analysis. The pictures were coded into eight image categories (for examples see Figure 1), as none could be coded into the Political and economic factors category. Some pictures were included in more than one category, as it was possible for more than one theme to be projected in a single picture. For example, as seen in Figure 1, the fifth picture could be coded as both Leisure and recreation and Atmosphere, because the store is being portrayed as a luxurious place. The pictorial analysis was done in three stages. Firstly, one year's data were randomly selected and used to conduct a pilot coding exercise. Two researchers coded these pictures independently. Secondly, these researchers discussed their results and reached a consensus, which ensured their common understanding of the data interpretation for the remainder of the coding. Thirdly, they coded the remaining two years' pictorial data independently, and discussed any discrepancies before reaching an agreement for all pictures. During the picture coding process, both researchers also had several discussions with a senior researcher about the appropriate categorization. Chi-square tests were conducted using XLSTAT (2009 version), an Excel add-on tool, to examine the changes in the images of Hong Kong and Macau portrayed as well as the congruency between texts and pictures.

(Figure 1 here)

Results and Discussion

13

Of the nine components recommended by Beerli and Martin (2004a, 2004b), only Political and economic factors was not mentioned often enough in the data to warrant being used as a separate category (Table 2). Beerli and Martin's components of Natural resources and Natural environment appeared to have a certain degree of overlap and some attributes could not be easily classified as one or the other. Thus, these two components were amended as Natural resources and Physical environment. From the six sampled travel magazines over the three-year period, 6,512 image attributes were identified from texts and 681 from pictures about Hong Kong, and 2,492 from texts and 225 from pictures about Macau.

(Table 2 here)

Image categories of Hong Kong and Macau from texts

Hong Kong's top two image categories were Leisure and recreation and Culture, history, and art; the latter was also Macau's most frequently-mentioned category. The top ten attributes of Hong Kong and Macau as mentioned in texts are shown in bold in Table 3.

(Table 3 here)

In the category of Leisure and recreation, the popularity of Place and attraction is perhaps due to writing style, as journalists need to mention a place before elaborating further. Most tourist activities are also likely to be associated with specific locations. The most

frequently mentioned places and attractions in Hong Kong were Central (256), Kowloon (115), Causeway Bay (107), and Disneyland (102). These are must-see places for tourists. Beside Shopping and Brand, other terms such as Shopping mall and Shops are also related to shopping. For Macau, the most frequently reported places and attractions were Macau Tower (75), Coloane (64), and Ruins of St. Paul (57). Gambling was the second most popular attribute in this category, followed by Entertainment. Casinos are called "places of entertainment" in Chinese, so Gambling and Entertainment are related. Shopping, Brand and Shops, all terms associated with shopping, reflected the recent development of retail businesses in Macau.

In the category of Culture, history and art, the most popular attribute for Hong Kong was Cuisine and food; other common terms such as Tea and Coffee are also food related. Many articles included words such as Design, Art, Culture, Creative [industry], and Designer, all of which are associated with culture and the newly-developed creative industry. Hong Kong is also famous for Movie, Music and Movie stars, especially in the 1980s and early 1990s when it produced numerous popular movies and music recordings, with many movie stars becoming famous beyond Hong Kong. To pay tribute to outstanding film professionals and record the splendid history of Hong Kong's film industry, the Hong Kong Tourism Commission built the Avenue of Stars in 2004. For Macau, Culture, history and art played an even more dominant role. Cuisine and food, Snack, Tea, and Coffee are all important in Macanese cuisine. Other major attributes such as Church, History, Temple, Portuguese style, and Heritage are part of Macau's cultural heritage and history.

Tourist infrastructure was the third-largest category for both Hong Kong and Macau. Hotel and Restaurant are important images within the Tourist infrastructure. Hong Kong and Macau both offer a large selection of accommodation ranging from budget to luxury hotels; some of the latter are ranked among the best in the world. A variety of restaurants can be easily found in both destinations.. Bars in Hong Kong's Lang Kui Fung district and Tea houses in Macau were also frequently mentioned in these articles.

In terms of the remaining four image categories, Hong Kong and Macau presented different attributes on General infrastructure, but similar attributes on Atmosphere, Physical environment, and Natural resources. Hong Kong has a versatile general infrastructure including land, water, and air transportation systems, whereas Macau's destination attributes focused on Pier and Ferry. Ferry was the most popular attribute in this category for Hong Kong, which may be due to its geographic characteristics. The ferry serves as a convenient and inexpensive transport mode connecting Hong Kong Island to the Kowloon peninsula and outlying islands. The second most popular attribute was the Mass Transit Railway (MTR). As the MTR covers almost all major areas of Hong Kong, it is regarded as a convenient transportation system. One article even highlighted tourist activities around every MTR station, and presented a MTR travel itinerary for tourists. For Atmosphere, Physical environment, and Natural resources, some popular image attributes were Fashionable and Architecture. Fashionable refers to a modern and stylish Hong Kong, due to its metropolis nature and the mix of Chinese and

Western cultures. Architecture denotes the old, traditional, colonial architectures in Hong Kong and Macau.

For both cities, the top four categories listed above accounted for over 90% of the total attributes, and the remaining three categories for only about 10%. Atmosphere had a low frequency, probably because most of the words in this category were adjectives, which appear less frequently than nouns in the Chinese language. Physical environment and Natural resources attributes also appeared infrequently, for which there could be two explanations. Firstly, Hong Kong and Macau have fewer cultural and natural landscapes than Mainland China (Hsu & Gu, 2010), thus these may not be attractive to the Mainland tourists. Secondly, the respective tourism board may not have focused on these aspects when liaising with travel writers in China to promote natural resources such as Hong Kong's Geopark and Wetland Park.

The variety and frequency of the image attributes reported in travel magazines may be correlated with the demands of Chinese travelers. A good understanding of their mentality could help explain the reporting of some image attributes in these magazines. Hong Kong and Macau are Mainland China's top two outbound destinations, so there is a demand for detailed information about them from different sources. In the mind of the Mainland Chinese, Hong Kong is a shopping paradise offering a variety of duty-free products; therefore, many would consider shopping as their main motivation to visit Hong Kong (Huang & Hsu, 2005; Leung et al., 2011). Hong Kong is also a place where East meets West, and it is regarded as the "Culinary Capital of Asia" (Hong Kong

Tourism Board, 2010). For Mainland travelers, tasting a range of local, Asian, and Western cuisines might be another reason to visit Hong Kong (Leung et al., 2011). Some travelers return to the same destination to savor its unique food, which is an essential element of the tourist experience (Hall & Sharples, 2003). Mainland Chinese travelers perceive Macau as Asia's Las Vegas, a view highly correlated with its gambling offerings (Tang et al., 2009). Macau is also well known for its culinary culture, heritage, and historical attractions (Pan, Chon, & Song, 2008; Choi et al., 2007). Therefore, travel magazines reported these common attributes to meet the needs of Mainland Chinese travelers.

Hong Kong and Macau are mature outbound destinations for Mainland Chinese, with a growing number of independent repeat travelers. The trip characteristics of Mainland Chinese have become more diverse and sophisticated; and they are more confident in making various travel decisions (Hsu, Cai, & Li, 2010). In order to meet the needs of these independent repeat visitors, information about hotels and restaurants in Hong Kong and Macau were provided. Some unpopular activities for mass tourists, such as those related to the creative industries and adventurous sports, were also covered in these magazines. These attributes (e.g., details of the creative industries and hotels/restaurants in Hong Kong, and cuisine and food for Macau) had not been reported in previous destination image studies. This could be a result of the efforts made by destination marketing organizations (DMOs) to communicate with the media.

For both Hong Kong and Macau, reporting frequencies for four of the seven image categories changed significantly over the period of 2006-2008 (Table 4). In 2006 and 2007, many articles about Hong Kong focused on its creative activities, which could be explained by the Hong Kong Chief Executive's policy addresses in these two years having referred to the need to encourage and support their development (Hong Kong Institute of Planners, 2007). Tourist infrastructure, including hotels and restaurants, was reported more often in 2008. A review of these magazines showed that several articles introduced luxury hotels in Hong Kong, such as The Peninsula, Four Seasons, InterContinental, and Mandarin Oriental. These reports could be attributed to the hotels' own marketing efforts, because the average occupancy rate (79%) of High Tariff A hotels in 2008 was much lower than the year before due to the global financial crisis (Hong Kong Tourism Board, 2009). Due to the relatively low word count in the Physical environment and Natural resources categories, even a single article could make a significant difference. Thus, the differences found may appear large but be less meaningful in practice.

(Table 4 here)

Macau's image change could also be attributed to the reporting of major news and events. Leisure and recreation showed a significant rise in word frequency in 2007. Tourist infrastructure received significantly more reporting year on year. These changes reflected the timeline of casino and tourism development projects. In 2005, the plan for the Cotai Strip was announced, and the first stage of development was completed in 2007. This

19

phase included thousands of hotel rooms and several mega-casinos. Furthermore, Culture, history and art and Physical environment had more mentions in 2006, which reflected the listing of the Historic Centre of Macau as a United Nations World Heritage Site in 2005, followed by the "2006 Macau World Heritage Year" (Cheng, 2007). Because architecture and buildings are highly associated with world heritage sites, many articles mentioned Physical environment in 2006.

Image categories of Hong Kong and Macau from pictures

Altogether, 623 pictures of Hong Kong and 214 of Macau were analyzed. Some projected more than one theme, so the total number of pictorial image attributes was 681 for Hong Kong and 225 for Macau. Table 5 presents descriptive statistics of the pictorial image categories for both cities. The most frequently-projected pictorial images of Hong Kong were Culture, history and art; Leisure and recreation; Tourist infrastructure; and Physical environment, whereas for Macau, Culture, history and art dominated the pictorial images, followed by Tourist infrastructure and Leisure and recreation. Macau had no picture representing General infrastructure. These image categories are probably difficult to capture in a picture form and/or less attractive than photographs portraying other types of images.

(Table 5 here)

Over the three-year period studied, both destinations received significantly different pictorial coverage in two of the image categories. Images of Hong Kong in the Culture, history, and art category were shown less frequently in 2008. That year witnessed not only a dramatic decrease in the image attributes projected in pictures, but also the overall number of pictures. This paralleled the decrease in textual image attribute counts in the same year. Since the number of articles remained healthy, this signaled shorter articles about Hong Kong in magazines. Tourist infrastructure also saw a significant decrease as a theme of pictures in 2007. This could be related to the opening of casino and tourism projects in Macau that year. Macau had six more featured articles in 2007, whereas Hong Kong's reporting was reduced by four articles. With more pictures of Macau's new tourist infrastructure being published, pictures of a similar nature about other destinations may have been reduced to balance the overall flavor of the magazine. For Macau, significant differences were found in the categories of Leisure and recreation and Tourist infrastructure, with more representation in 2007 and 2008, again corresponding to the increase in number of articles found in both years.

Hong Kong experienced a dramatic annual decline of image attributes in photographs, from 379 in 2006, 199 in 2007, to 103 in 2008, whereas the corresponding decline in texts was less dramatic. With more space allocated to Macau's new tourist infrastructure and tourism development in general, other destinations may have faced reduced coverage in terms of article number, length, or photograph number to maintain the overall magazine page budget.

Image categories from texts vs. pictures

Previous studies showed that pictures should match the writing content in a travel article, and the congruity of texts and pictures in media may enhance readers' recall. However, several significant differences were found between the textual and pictorial images portrayed in magazine articles (see Table 6). For Hong Kong, General infrastructure, Physical environment, and Social environment demonstrated consistent differences in coverage between texts and pictures over the three-year period. General infrastructure was reported more in texts, whereas Physical and Social environments tended to be portrayed in pictures. Atmosphere also showed significant differences across two of the three years, with more text-based reporting. These differences could be related to the consideration that some images (such as physical and social environments) may be captured better by photographs than words and that some attributes (such as general infrastructure and atmosphere) may not be of sufficient importance to the reporting to warrant the use of space for pictures.

(Table 6 here)

Texts and pictures about Hong Kong demonstrated a certain degree of consistency, in that more image attributes were projected in the categories of Leisure and recreation, Culture, history and art and Tourist infrastructure. However, for these three categories, significant differences were found in the extent of reporting between texts and pictures in one of the three years examined. Leisure and recreation and Culture, history and art were reported

more in texts in 2006 and 2008, whereas Tourist infrastructure had more pictorial reporting in 2006. These differences could be coincidental or related to the selection of pictures in other articles in the magazines. For Macau, the discrepancies in image attributes projected between texts and pictures were relatively minor.

The incongruity of pictures and texts illustrated that travel magazines used different reporting formats to present the various image categories. For Hong Kong, numerous pictures of Physical environment and Tourist infrastructure were published. Pictures about Physical environment were mostly related to iconic buildings or the day and night views of the city, both of which are easily captured by photo journalists. The popularity of Tourist infrastructure might be influenced by DMOs or tourism suppliers. The differences across years could be a result of articles on a destination coming from different magazines in each year. The six magazines analyzed may have different editorial styles, as explained by Mercille (2005) who noted that different magazines use different numbers of photographs to illustrate specific themes. Therefore, some magazines may include more pictures, and others use more textual descriptions of a particular destination.

Conclusion

This research has made contributions to both academic inquiry and professional practice. Beerli and Martin's (2004a, 2004b) framework was used to classify reported destination attributes into image categories. While the framework was applicable to the data collected,

some refinement could be carried out for future studies. This study has also revealed that

the projected images of Hong Kong and Macau were dominated by attributes in Culture,

history and art and Leisure and recreation. To capture the essence of destination image

more effectively, and derive meaningful marketing strategies, each of these categories

could be further divided into smaller components. For example, Leisure could represent

leisurely, laid back, and passive activities, while Recreation could include more active

and engaging pursuits. Similarly, Culture, history and art could be separated into more

defined groups. Based on the attributes reviewed here, Food and cuisine, though

classified as part of Culture, history and art, could warrant a separate category. The

culinary traditions of a destination may reveal the character of a society, and the appeal of

local food is linked to a fascination for what visitors perceive as genuine communities

(Jacobsen & Haukeland, 2001). As history and culture are by nature intertwined and art is

closely associated with culture, they could remain as one image category. Thus, the

Beerli and Martin framework could be extended from nine to eleven categories: Natural

resources, General infrastructure, Tourist infrastructure, Leisure, Recreation, Culture and

history, Food and cuisine, Political and economic factors, Physical environment (changed

from Natural environment), Social environment, and Atmosphere.

The projected images of the two destinations reported here largely corresponded to those

reported in previous studies. Hong Kong has been most often described by image

attributes such as Place and attraction, Shopping, Brand, Cuisine, and Design, echoing the

findings from previous studies illustrating the city as a shopping paradise (Huang & Hsu,

2005) famous for its cuisine (Leung et al., 2011). For Macau, Gambling as well as

History and heritage were often reported, consistent with the results of McCartney's (2005) and Tang et al.'s (2009) studies. Generally, Chinese travel magazines presented a multi-faceted destination image to their readers, with Hong Kong focusing on places and attractions, shopping, cuisine and food, hotels, and creative industries and Macau on history and heritage, places and attractions, gambling, cuisine and food, and hotels. This is a departure from early travel magazines which mainly focused on sightseeing and tourist attractions. As China's outbound tourism continues to develop, tourists are becoming more experienced and confident in making choices of destinations, tourist activities, and accommodation (Hsu et al., 2010). China's travel magazines have begun to provide a full range of information to tourists, from leisure and recreation, cultural activities and hotels, to restaurants.

During the period 2006-2008, Hong Kong and Macau saw several significant changes in the attributes featured in both texts and pictures in magazines. These changes were partly influenced by news and events happened during the period. As the number of articles and attributes of Macau reported in text increased in 2007, coverage of Hong Kong decreased. In fact, image attributes of Hong Kong from both texts and pictures decreased year on year. This could be a reflection of the efforts of Macau and other destinations to work with magazines and the media in general to generate news worthy of reporting. Pan and Ryan (2007) suggested that marketing managers of national tourism organizations play a key role as gatekeepers in communicating promotional themes to media agents and indirectly help decide the final content of materials presented. The results of this study served as a reminder for Hong Kong and Macau DMOs to work more closely with

Mainland Chinese media outlets in facilitating the building and reinforcement of a favorable destination image among potential (re)visitors from their largest source market. DMOs could provide familiarization tours and other inducements for travel journalists and editors, and invite them to work on travel articles about the destinations (Fürsich & Kavoori, 2001). Information and photographs in a readily-printable format could also be provided to major magazines to encourage reporting. If any attributes are important elements of the destination image, DMOs should communicate them more aggressively to the media to pick up future reporting. This is especially important when competing destinations develop quickly and on a large scale so as to attract media attention. Due to the limited space available in the print media, destinations that are not catching the attention will lose out on opportunities for image-building exposure.

In addition, DMOs have to understand the characteristics of readers who subscribe to these travel magazines, because different publications have different target markets. Generally, Chinese travel magazines focusing on outbound tourism target young and middle-aged readers with high incomes. In this case, DMOs firstly have to examine their travel behaviors, such as their preferred travel activities, outbound destinations, and travel styles, then review their perceived destination image. A better understanding of their target markets could help DMOs design detailed and effective marketing strategies.

This study has several limitations, which indirectly provide some suggestions for future research directions. Firstly, only data from 2006 to 2008 in China's top six outbound travel magazines were analyzed. The destination images projected in these three years

may be different from those in other years, so future studies could include data sources over a longer timeframe. Secondly, this study only selected the top 100 Chinese words and expressions. Some unique terms could have been missed. Different travel journalists usually have different writing styles, so they may use different expressions to describe the same activities or travel experiences. Future studies could use manual data coding of all articles to consider the meaning of each phrase instead of using simple word counts, so that the image attributes projected could be more comprehensively captured and analyzed. Thirdly, this study only conducted a categorization of pictures based on the main themes communicated, without identifying the source or considering the size of photographs. Photographs from different providers, such as DMOs or photo journalists, may intend to convey different messages. Different sizes could also make different impressions on the readers. Finally, this study was limited to a review of the images projected, without looking into their impact on readers' actual image formation. Future research using an experimental design could examine the influence of travel magazines on travelers' perceived destination image and visit intention. Despite these limitations, this study has provided information on one piece of a complex puzzle, which could enhance our understanding of the overall destination images of Hong Kong and Macau. The use of Beerli and Martin's (2004a, 2004b) framework also provided evidence for the basic soundness of this model. Ways to further refine the structure of the classification scheme have also been suggested, which would contribute to theory development of destination images.

References

Aramberri J and Liang C (2012) The Chinese gaze: Imaging Europe in travel magazines. *Journal of China Tourism Research* 8(3): 284-301.

Baloglu S and McCleary KW (1999) A model of destination image formation. *Annals of Tourism Research* 26(1): 868-897.

Bandyopadhyay R and Morais D (2005). Representative dissonance: India's self and western image. *Annals of Tourism Research* 32(4): 1006-1021.

Beerli A and Martin JD (2004a) Factors influencing destination image. *Annals of Tourism Research* 31(3): 657-681.

Beerli A and Martin JD (2004b) Tourists' characteristics and the perceived image of tourist destination: A qualitative analysis – a case study of Lanzarote, Spain. *Tourism Management* 25(5): 623-636.

Bieger T and Laesser C (2004) Information sources for travel decision: Toward a source process model. *Journal of Travel Research* 42(4): 357-371.

Brosius HB, Donsbach W and Birk M (1996) How do text-picture relations affect the informational effectiveness of television newscasts? *Journal of Broadcasting & Electronic Media* 40(2): 180-195.

Castelltort M and Mader G (2010) Press media coverage effects on destinations – A Monetary Public Value (MPV) analysis. *Tourism Management* 31(6): 724-738.

Cheng IM (2007) A comparative study of travel behavior of single and multi-destination travelers from Mainland China in Macao. *China Tourism Research* 3(4): 449-459.

China Tourism Academy (2012) China's tourism income in 2011 is around 1.9 trillion RMB. Available at http://www.china.com.cn/travel/txt/2012-01/11/content_24376028.htm

Choi WM, Chan A and Wu J (1999) A qualitative and quantitative assessment of Hong Kong's image as a tourist destination. *Tourism Management* 20(3): 361-365.

Choi S, Lehto XY and Morrison AM (2007) Destination image representation on the web: Content analysis of Macau travel related websites. *Tourism Management* 28(1): 118-129.

CNTA (2011) Statistic report of tourism industry of China. Available at: http://www.cnta.com/html/rjy/index.html

Echtner CM and Ritchie JR (1993) The measurement of destination image: An empirical assessment. *Journal of Travel Research* 31(4): 3-13.

Fürsich E and Kavoori AP (2001) Mapping a critical framework for the study of travel journalism. *International Journal of Cultural Studies* 4(2): 149-171.

Gartner WC (1993) Image formation process. *Journal of Travel and Tourism Marketing* 2(2/3): 191-215.

Gartner W and Shen J (1992) The impact of Tiananmen square on China's tourism image. *Journal of Travel Research* 30(4): 47-52.

Govers R, Go F and Kumar K (2007) Promoting tourism destination image. *Journal of Travel Research* 46(1): 15-23.

Graber DA (1990) Seeing is remembering: How visuals contribute to learning from television news. *Journal of Communication* 40(3): 134-156.

Hall CM and Sharples L (2003) The consumption of experiences or the experience of
consumption? An introduction to the tourism of taste. In *Food tourism around the
world: Development, management and markets* (ed CM Hall, L Sharples, R
Mitchell, N Macionis and B Cambourne), pp. 1-24, Oxford: Butterworth-
Heinemann.

Hanefors M and Mossberg L (2002) TV travel shows: A pre-taste of the destination.
Journal of Vacation Marketing 8(3): 235-246.

Hanlan J and Kelly S (2005) Image formation, information sources and an iconic
Australian tourist destination. *Journal of Vacation Marketing* 11(2): 163-177.

Hong Kong Institute of Planners (2007) Relationship between creative industry and city
development. Available at:

http://www.hkip.org.hk/CI/chi/images/pressrelease070403.pdf

Hong Kong Tourism Board (2009) Summary of the Hong Kong hotel industry review
2008. Available at:

http://partnernet.hktb.com/pnweb/jsp/comm/index.jsp?charset=en&pageContent=
%2Fjsp%2Frso%2Frso.jsp

Hong Kong Tourism Board. (2010) Hong Kong: Dynamic metropolis steeped in unique
blends of East and West. Available at http://www.discoverhongkong.com/eng/

Hong Kong Tourism Board (2011) A statistical review of Hong Kong Tourism 2010.
Available at:

http://partnernet.hktb.com/pnweb/jsp/doc/listDoc.jsp?doc_id=138859&cat_id=363
2&logs=yes&type=FREEhttp://partnernet.hktb.com/pnweb/jsp/doc/listDoc.jsp?doc
_id=138859&cat_id=3632&logs=yes&type=FREE

Hsu CHC, Cai LA and Li M (2010) Expectation, motivation, and attitude: A tourist behavioral model. *Journal of Travel Research* 49(3): 282-296.

Hsu CHC and Gu Z (2010) Ride on the gaming boom: How can Hong Kong, Macau and Zhuhai join hands to develop tourism in the region? *Asia Pacific Journal of Tourism Research* 15(1): 57-77.

Hsu CHC and Song H (2012) Projected images of major Chinese outbound destinations. *Asia Pacific Journal of Tourism Research* 17(5): 577-593.

Huang S and Hsu CHC (2005) Mainland Chinese residents' perceptions and motivations of visiting Hong Kong: Evidence from focus group interviews. *Asia Pacific Journal of Tourism Research* 10(2): 191-205.

Hui TK and Wan TWD (2003) Singapore's image as a tourist destination. *International Journal of Tourism Research* 5(4): 305-313.

Jacobsen JKS and Haukeland JV (2001) A lunch with a view: Motorists' choices and assessments of eating-places. Available at: http://wasa/shh.fi/konferens/abstract/a6-haukeland.pdf.

Jenkins O (2003) Photography and travel brochures: The circle of representation. *Tourism Geographies* 5(3): 305-328.

Kim H and Richardson SL (2003) Motion picture impacts on destination images. *Annals of Tourism Research* 30(1): 216-237.

Leung D, Law R and Lee HA (2011) The perceived destination image of Hong Kong on Ctrip.com. *International Journal of Tourism Research* 13(2): 124-140.

Macau Government Tourist Office (2010) Visitor arrivals of Macau. Available at: http://industry.macautourism.gov.mo/e-publication/MTTS2009/pdf/6/ch_6.1.pdf

Macau Government Tourist Office (2012) Visitor arrivals of Macau in 2011. Available at: http://industry.macautourism.gov.mo/en/Statistics_and_Studies/list_statistics.php?id=29&page_id=10

MacKay KJ and Fesenmaier DR (1997) Pictorial element of destination in image formation. *Annals of Tourism Research* 24(3): 537-565.

Mansfeld Y (1992) From motivation to actual travel. *Annals of Tourism Research* 19(3): 399-419.

McCartney G (2005) Staging events as a destination tourism development strategy and the implications for Macao. In *Innovation in Tourism – Creating Customer Value AIEST 55th Congress 2005* (ed P Keller and T Bieger), pp.143-157, St. Gallen, Switzerland: AIEST.

McCartney G, Butler R and Bennett M (2009) Positive tourism image perceptions attract travellers – fact or fiction? The case of Beijing visitors to Macao. *Journal of Vacation Marketing* 15(2): 179-193.

Meihua Network. (2009). China's media search database. Available at http://www.meihua.info/mediasearch/

Mendelson AL and Darling-Wolf F (2009) Readers' interpretations of visual and verbal narratives of a National Geographic story on Saudi Arabia. *Journalism* 10(6): 798-818.

Mercille J (2005) Media effects on image: The case of Tibet. *Annals of Tourism Research* 32(4): 1039-1055.

Miller DW, Hadjimarcou J and Miciak A (2000) A scale for measuring advertisement-evoked mental imagery. *Journal of Marketing Communications* 6(1): 1-20.

Molina A and Esteban A (2006) Tourism brochures: Usefulness and image. *Annals of Tourism Research* 33(4): 1036-1056.

O'Leary S and Deegan J (2003) People, pace, place: Qualitative and quantitative images of Ireland as a tourism destination in France. *Journal of Vacation Marketing* 9(3): 213-226.

O'Leary S and Deegan J (2005) Ireland's image as a tourism destination in France: Attribute importance and performance. *Journal of Travel Research* 43(3): 247-256.

Özdemir G (2010) Photographs in brochures as the representations of induced image in the marketing of destinations: A case study of Istanbul. In *Tourism and visual culture, Volume 2: Methods and cases* (ed PM Burns, JA Lester and L Bibbings), pp. 169-180, Cambridge, Mass: CAB International.

Pan S (2011) The role of TV commercial visuals in forming memorable and impressive destination images. *Journal of Travel Research* 50(2): 171-185.

Pan S, Chon K and Song H (2008) Visualizing tourism trends: A combination of ATLAS.ti and BiPlot. *Journal of Travel Research* 46(3): 339-348.

Pan S and Ryan C (2007) Gender, framing, and travelogues. *Journal of Travel Research* 45(4): 464-474.

Phau I, Shanka T and Dhayan N (2010) Destination image and choice intention of university student travelers to Mauritius. *International Journal of Contemporary Hospitality Management* 22(5): 758-764.

Phillips W and Jang S (2010) Destination image differences between visitors and non-visitors: A case of New York City. *International Journal of Tourism Research* 12(5): 642-645.

Sparks B and Pan GW (2009) Chinese outbound tourists: Understanding their attitudes, constraints and use of information sources. *Tourism Management* 30(4): 483-494.

Stern E and Krakover S (1993) The foundation of a composite urban image. *Geographical Analysis* 25(2): 130-146.

Tang L, Choi S, Morrison AM and Lehto XY (2009) The many faces of Macau: A correspondence analysis of the images communicated by online tourism information sources in English and Chinese. *Journal of Vacation Marketing* 15(1): 79-94.

Tang L, Scherer R and Morrison AM (2011) Web site-based destination images: A comparison of Macau and Hong Kong. *Journal of China Tourism Research* 7(1): 2-19.

Tourism Commission (2012) Hong Kong's Tourism Performance in 2011. Available at: http://www.tourism.gov.hk/english/statistics/statistics_perform.html

van der Molen JHW (2001) Assessing text-picture correspondence in television news: The development of a new coding scheme. *Journal of Broadcasting & Electronic Media* 45(3): 483-498.

van der Molen JHW and van der Voort THA (2000) The impact of television, print, and audio on children's recall of the news: A study of three alternative explanations for the dual-coding hypothesis. *Human Communication Research* 26(1): 3-26.

Woodside A and Lysonski S (1989) A general model of traveller destination choice. *Journal of Travel Research* 27(1): 8-14.

Table 1: Number of articles retrieved from travel magazines

Year Magazines (Circulation)	Hong Kong			Macau			Total
	2006	2007	2008	2006	2007	2008	
Voyage (558,000)	3	3	4	0	2	1	13
National Geographic Traveler (494,200)	5	2	4	2	1	3	17
World Traveler (357,000)	3	2	2	1	2	1	11
Traveling Scope (320,000)	3	4	4	1	2	0	14
Travel + Leisure (300,000)	6	6	6	0	2	2	22
Traveler (300,000)	3	2	2	1	2	1	11
Total	23	19	22	5	11	8	88

Table 2: Destination image categories of Hong Kong and Macau

Beerli and Martin (2004a, 2004b) Categorization	Current Study's Categorization	Hong Kong		Macau	
		Text	Picture	Text	Picture
Tourist leisure and recreation	Leisure and recreation	2,275 (34.9%)	172 (25.3%)	664 (26.6%)	38 (16.9%)
Culture, history and art	Culture, history and art	2,224 (34.2%)	198 (29.1%)	1,086 (43.6%)	110 (48.9%)
Tourist infrastructure	Tourist infrastructure	828 (12.7%)	151 (22.2%)	422 (16.9%)	43 (19.1%)
General infrastructure	General infrastructure	719 (11.0%)	18 (2.7%)	97 (3.9%)	--
Atmosphere of the place	Atmosphere	228 (3.5%)	6 (0.9%)	74 (3.0%)	6 (2.7%)
Natural environment	Physical environment	178 (2.7%)	106 (15.6%)	128 (5.1%)	16 (7.1%)
Natural resources	Natural resources	60 (0.9%)	9 (1.3%)	21 (0.8%)	3 (1.3%)
Social environment	Social environment	--	21 (3.1%)	--	9 (4.0%)
Political and economic factors	--	--	--	--	--
	Total	6,512 (100%)	681 (100%)	2,492 (100%)	225 (100%)

Table 3: Destination image attributes in texts

Destination ╲ Categories	Hong Kong Attributes (Frequency)[a]	Macau Attributes (Frequency)[b]
Leisure and recreation	**Place and attraction** (1,420); **Shopping** (257); **Brand** (169); Sports (83); Shopping mall (69); Sailing (48); Spa (38); Shops (34)	**Place and attraction** (271); **Gambling** (183); Entertainment (68); Shopping (29); Brand (25); Shops (21); Sports (20)
Culture, history and art	**Cuisine and food** (327); **Design** (231); **Art** (179); **Culture** (174); Creative [industry] (124); Movie (111); Tea (108); Designer (98); China (96); Bookstore (94); Music (79); Temple (73); History (51); Museum (46); Coffee (45); Italy (44); Performing (39); Cantonese opera (33); Movie star (32)	**Cuisine and food** (117); **Snack** (90); **Church** (83); **History** (82); **Design** (74); Temple (71); China (67); Portuguese style (60); Art (51); Museum (42); Tea (42); Performing (37); Italy (35); Coffee (29); Heritage (24); Music (23);
Tourist infrastructure	**Hotel** (458); **Restaurant** (228); Bar (59); Tea restaurant (42)	**Hotel** (272); **Restaurant** (112); Tea house (21)
General infrastructure	**Ferry** (201); MTR (105); Pier (79); Bus (73); Currency (72); Airport (55); Tram (40); Bridge (38); Peak tram (33)	Pier (51); Ferry (20)
Atmosphere	Fashionable (118); Traditional (77); Fresh feeling (33)	Traditional (41); Fresh feeling (26)
Physical environment	Architecture (84); Shophouse (33)	**Architecture** (97); Building (23)
Natural resources	Scenery (60)	Scenery (21)

Notes: [a]: For Hong Kong, only those words with a frequency of more than 30 are listed.
　　　 [b]: For Macau, only those words with a frequency of more than 20 are listed.

Table 4: Destination image categories in texts

Categories	Hong Kong				Macau			
	2006	2007	2008	x^2	2006	2007	2008	x^2
Leisure and recreation	942[a] (36.0%)[b]	750 (33.2%)	583 (35.6%)	n.s.	163 (19.9%)	316 (34.7%)	185 (24.3%)	51.89**
Culture, history and art	858 (32.8%)	909 (40.2%)	457 (27.9%)	67.17**	470 (57.2%)	319 (35.1%)	297 (39.0%)	95.68**
Tourist infrastructure	315 (12.1%)	192 (8.5%)	321 (19.6%)	107.48**	61 (7.4%)	169 (18.6%)	192 (25.2%)	91.69**
General infrastructure	298 (11.4%)	257 (11.4%)	164 (10.0%)	n.s.	26 (3.2%)	33 (3.6%)	38 (5.0%)	n.s.
Atmosphere	92 (3.5%)	72 (3.2%)	64 (3.9%)	n.s.	18 (2.2%)	30 (3.3%)	26 (3.4%)	n.s.
Physical environment	88 (3.4%)	72 (3.2%)	18 (1.1%)	22.11**	79 (9.6%)	36 (4.0%)	13 (1.7%)	54.86**
Natural resources	21 (0.8%)	9 (0.4%)	30 (1.8%)	22.07**	4 (0.5%)	7 (0.8%)	10 (1.3%)	n.s.
Total	2614 (100%)	2261 (100%)	1637 (100%)		821 (100%)	910 (100%)	761 (100%)	

Notes: [a]: frequency; [b]: percentage; * $p < 0.05$; ** $p < 0.01$; n.s.: not significant

Table 5: Destination image categories in pictures

Categories	Hong Kong				Macau			
	2006	2007	2008	x^2	2006	2007	2008	x^2
Culture, history and art	114[a] (30.0%)[b]	69 (34.7%)	15 (14.6%)	8.125*	55 (66.3%)	19 (34.5%)	36 (41.4%)	n.s.
Leisure and recreation	83 (21.9%)	60 (30.2%)	29 (28.2%)	n.s.	6 (7.2%)	12 (21.8%)	20 (23.0%)	6.485*
Tourist infrastructure	105 (27.7%)	16 (7.5%)	30 (29.1%)	22.632**	7 (8.4%)	17 (30.9%)	19 (21.8%)	7.904*
Physical environment	47 (12.4%)	39 (19.6%)	20 (19.4%)	n.s.	8 (9.6%)	3 (5.5%)	5 (5.7%)	n.s.
Social environment	11 (2.9%)	5 (2.5%)	5 (4.9%)	n.s.	3 (3.6%)	1 (1.8%)	5 (5.7%)	n.s.
General infrastructure	8 (2.2%)	10 (5.0%)	1 (1.0%)	n.s.	--	--	--	--
Atmosphere	5 (1.3%)	--	1 (1.0%)	n.s.	3 (3.6%)	3 (5.5%)	--	n.s.
Natural resources	6 (1.6%)	1 (0.5%)	2 (1.9%)	n.s.	1 (1.2%)	--	2 (2.3%)	n.s.
Total	379 (100%)	199 (100%)	103 (100%)		83 (100%)	55 (100%)	87 (100%)	

Notes: [a]: frequency; [b]: percentage; * $p<0.05$; ** $p<0.01$; n.s.: not significant

Table 6: Destination image categories in texts vs. pictures

Categories	2006			2007			2008		
	Hong Kong								
	Text	Picture		Text	Picture		Text	Picture	
Leisure and recreation	942[a] (36.0%)[b]	83 (21.9%)	15.19**	750 (33.2%)	60 (30.2%)	n.s.	583 (35.6%)	29 (28.2%)	n.s.
Culture, history and art	858 (32.8%)	114 (30.0%)	n.s.	909 (40.2%)	69 (34.7%)	n.s.	457 (27.9%)	15 (14.6%)	5.00*
Tourist infrastructure	315 (12.1%)	105 (27.7%)	15.06**	192 (8.5%)	16 (7.5%)	n.s.	321 (19.6%)	30 (29.1%)	n.s.
General infrastructure	298 (11.4%)	8 (2.2%)	26.11**	257 (11.4%)	10 (5.0%)	5.82*	164 (10.0%)	1 (1.0%)	7.25*
Atmosphere	92 (3.5%)	5 (1.3%)	4.20*	72 (3.2%)	--	5.25*	64 (3.9%)	1 (1.0%)	n.s.
Physical environment	88 (3.4%)	47 (12.4%)	52.01**	72 (3.2%)	39 (19.6%)	89.29**	18 (1.1%)	20 (19.4%)	118.86**
Natural resources	21 (0.8%)	6 (1.6%)	n.s.	9 (0.4%)	1 (0.5%)	n.s.	30 (1.8%)	2 (1.9%)	n.s.
Social environment	--	11 (2.9%)	66.47**	--	5 (2.5%)	44.08**	--	5 (4.9%)	60.66**
Total	2614 (100%)	379 (100%)		2261 (100%)	199 (100%)		1637 (100%)	103 (100%)	
	Macau								
	Text	Picture		Text	Picture		Text	Picture	
Leisure and recreation	163 (19.9%)	6 (7.2%)	5.22*	316 (34.7%)	12 (21.8%)	n.s.	185 (24.3%)	20 (23.0%)	n.s.
Culture, history and art	470 (57.2%)	55 (66.3%)	n.s.	319 (35.1%)	19 (34.5%)	n.s.	297 (39.0%)	36 (41.4%)	n.s.
Tourist infrastructure	61 (7.4%)	7 (8.4%)	n.s.	169 (18.6%)	17 (30.9%)	n.s.	192 (25.2%)	19 (21.8%)	n.s.
General infrastructure	26 (3.2%)	--	n.s.	33 (3.6%)	--	n.s.	38 (5.0%)	--	n.s.
Atmosphere	18 (2.2%)	3 (3.6%)	n.s.	30 (3.3%)	3 (5.5%)	n.s.	26 (3.4%)	--	n.s.
Physical environment	79 (9.6%)	8 (9.6%)	n.s.	36 (4.0%)	3 (5.5%)	n.s.	13 (1.7%)	5 (5.7%)	4.00*
Natural resources	4 (0.5%)	1 (1.2%)	n.s.	7 (0.8%)	--	n.s.	10 (1.3%)	2 (2.3%)	n.s.
Social environment	--	3 (3.6%)	19.13**	--	1 (1.8%)	n.s.	--	5 (5.7%)	32.80**
Total	821 (100%)	83 (100%)		910 (100%)	55 (100%)		761 (100%)	87 (100%)	

Notes: [a]: frequency; [b]: percentage; * $p<0.05$; ** $p<0.01$; n.s.: not significant

Figure 1: Examples of picture coding

Sources: Softcopies from *Travel + Leisure*, 2006-2008.

Note: 1, the original size of each picture has been modified to the same size in Figure 1;

2, the layout of pictures (left to right, top to bottom): *1). Leisure and recreation, 2). Culture, history and art, 3). Tourist infrastructure, 4). General infrastructure, 5). Atmosphere, 6). Physical environment, 7). Natural resources, and 8). Social environment.*