

Research on Foreign Tourists' Perception of Tourism Image of Shaolin Temple on the Basis of Network Text Analysis

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Abstract—Tourism destination image of scenic spots has a direct influence on foreign tourists' consuming choices while visiting China, therefore it is the foundation for effectively improving the tourism destination image as well. This article is based on the original network text of foreigners' original comments on Shaolin Temple from the biggest travel website in the world – Tripadvisor; and it did the online text analysis with the analyzing tool of ROST CM from the perspective of Grounded Theory in Qualitative Study from the following aspects: word frequency, social semantic meaning, emotions and tourism image perception and puts forward corresponding measures for the improvement of Shaolin Temple's international tourism image.

Index Terms—Foreign tourists, grounded theory, shaolin temple, tourism image perception.

I. INTRODUCTION

Shaolin Temple, founded in the Northern Wei Dynasty (about 495 BC), is the birthplace of Chinese Zen Buddhism and Shaolin martial arts. It is national 5A tourist attraction and enjoys the reputation of “the first famous temple in the world” [1]. Shaolin Temple was built at the foot of Wuru Peak of Songshan Mountain in Zhengzhou City, Henan Province. It is named “Shaolin Temple” because it is located in the dense forest of Shaoshi Mountain in the hinterland of Songshan mountain. In August 2010, the historic buildings such as Shaolin Temple, Chuzu'an, Pagoda Forest and other historical buildings were listed as world cultural heritage by UNESCO, which is one of the business cards of Chinese culture spreading to the world. Shaolin Temple is famous at home and abroad. It receives more than 4 million tourists from home and abroad every year. It is a worthy national symbol of Chinese culture spreading to the world. Shaolin Temple, legend of Shaolin temple and new Shaolin Temple, which are based on the contribution of thirteen stick monks to save the king of Tang Dynasty and the martial monks of Shaolin Temple in the past dynasties, endow Shaolin Kung Fu with unique mysterious color and attract tourists from all over the world to see Shaolin Temple and Shaolin Kung Fu of China. The international effect of Shaolin Temple plays an important role in the communication and development of Chinese culture and Henan culture. It is of strategic significance and research value to study the perception of foreign tourists on the tourism image of Shaolin Temple and

enhance the international image of Shaolin temple for the dissemination and development of Henan culture and Chinese culture as well.

II. RESEARCH BASEMENTS

A. Network Text Analysis

Text content analysis is an objective, systematic and quantitative research method to describe the content of communication [2]. Its essence is to infer the accurate meaning of words and sentences with representational meaning. Network text analysis is a content analysis method based on network information source [3]. This paper uses the method of network text analysis to sort out the online evaluation of Shaolin Temple scenic spot published on TripAdvisor website, which has more than 300 million real online tourism evaluation of global tourists. With the help of content analysis software of Rost CM, high-frequency word analysis and semantic network analysis of online text.

B. Grounded Theory

Grounded theory is a method of qualitative research. Its main idea is to establish theory on the basis of empirical data [4]. It is required that before starting the research, researchers should start from the actual observation, comprehensively collect data, find out the core concepts reflecting the essence of things, and construct the theory through the connection between concepts, which is a method to establish substantive theory from the bottom up [5]. This article analyzes the grounded theory three-level coding for foreign tourists' medium and poor evaluation of Shaolin Temple scenic spot.

C. Data Acquisition

Online reviews are spontaneous sharing of their own travel experience and feelings on the website after visiting, which can truly reflect the experience of tourists [6]. TripAdvisor is a well-known travel website and Travel Exchange Community in the world. TripAdvisor has more than 300 million tourists' real comments on more than 190 national scenic spots, Tourists from all over the world share travel strategies and travel guides selflessly, which is a tourism website with high audience rate and tourist evaluation. TripAdvisor's visitors come from all over the world, and foreign tourists' comments cover 28 world languages. The evaluation of foreign tourists collected from Tripadvisor can reflect the real evaluation of Shaolin Temple scenic spot from foreign tourists.

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III. RESEARCH PROCEDURES

A. Analysis of High Frequency Words

First of all, we use the software of Rost CM to analyze the 39447 words of foreign tourists' evaluation of Shaolin Temple scenic spot collected from TripAdvisor, and get a brief overall impression of foreign tourists' evaluation on Shaolin Temple.

And then analyze the English words frequencies, and then select the top 90 effective high-frequency words related to the research topic as the keys to do the following analysis by Rost CM. The effect of the frequently appeared words directly show foreign tourists' evaluations and first impressions on Shaolin Temple and the Table I is as follows.

TABLE I: HIGH FREQUENCY WORDS 11652

Word	frequency	class	Word	frequency	class
Temple	565	n	Kids	46	n
Shaolin	371	n	Station	39	n
Show	230	n	Amazing	39	a
Kungfu	226	n	Performance	38	n
See	212	v	Recommend	33	v
Place	188	n	Zhengzhou	32	n
Visit	154	v	Train	32	n
Monks	134	n	Impressive	29	a
Time	110	n	Fee	28	n
Martial	107	a	English	27	n
Bus	106	n	Different	27	a
Worth	106	v	Price	27	n
Area	101	n	Deng feng	26	n
Art	97	n	Crowded	26	a
Day	97	n	Song	26	n
Walk	93	v	Zen	25	n
Chinese	92	a/n	Car/taxi/drive	23	n
Forest	92	n	Movies	25	n
Like	91	v	Commercialize	22	a
Pagoda	91	n	Hike	22	v
China	89	n	Park	22	v/n
Mountain	80	n	Group	21	n
Way	79	n	Buddhists	21	n
Luoyang	76	n	Complex	21	a
Back	74	adv	Food	20	n
Entrance	73	n	Enjoy	19	v
Well	68	adv	Miss	19	v
Good	67	a	Famous	19	a
History	64	n	Shops	19	n
People	64	n	Learn	19	v
Tour	62	n	Prepared	19	a
RMB	61	n	Special	18	a
Training	59	n	Disappointed	18	a
Cable	58	n	Longmen	18	n
Students	57	n	Couple	17	n
Site	55	n	Local	17	a
Tourists	51	n	Selling	17	n
Great	51	a	Expensive	16	a
Guide	51	n	Cave	16	n
Beautiful	50	a	Expected	16	a
Nice	49	a	Art	16	n
Hours	48	n	Fascinating	15	a

Word	frequency	class	Word	frequency	class
Experience	47	n	Henan	15	n
Ticket	47	n	Souvenir	15	n
Interesting	46	a	Shoes	12	n

As shown in Table I, 90 high-frequency words mainly include nouns, adjectives and verbs. Among them, most of them are nouns. The nouns with the frequency above 90 mainly include “Shaolin Temple, martial arts, show, temple, art, place, monk, time, bus, walking, Pagoda Forest”, etc. These nouns reflect that the main tourist attractions of Shaolin Temple in foreign tourists' perception image are martial Arts and Shaolin Zen culture. As foreign tourists, traveling to the Shaolin Temple scenic spot is equivalent to their outbound travel. As foreign tourists are generally arranged for 10 to 15 days or even shorter, they hope to achieve high efficiency and optimize the effect of overseas travel in Shaolin Temple. At the same time, because foreign tourists are not familiar with the geographical location of foreign scenic spots, they pay more attention to the geographical location, infrastructure construction of the scenic spot, and the mode of transportation [7]. Therefore, “Shaolin Temple, martial arts, show, temple, art, place, monk, time, bus, walk, Pagoda Forest “ have become the focus of foreign tourists. After these nouns, words with high frequency, such as “distance, Luoyang, Zen, Buddhism, Zhengzhou, Deng feng, taxi” and so on, indicate that Shaolin Temple is a foreign tourist destination for foreign tourists. In addition to the tourist attraction primer with the scenic spot's symbolic characteristics, foreign tourists also pay attention to the overall planning of outbound tourism [8]. It's also a key factor of the commuting routes from other tourism cities to Shaolin Temple, as well as the transportation and geographical location.

The adjectives such as “good, commercialized, complex, famous, disappointed, prepared, expensive and expected”, mainly reflect the tourists' post tour evaluation of the tourism activities and main attractions of Shaolin Temple scenic spot. These adjectives can more directly show the emotional attitude of foreign tourists in Shaolin Temple scenic spot, and also provide information sources for further research and analysis of tourists' emotional cognition.

The verbs “visit, be worth, walk, hike, appreciate, study”, reflect the feeling of travel experience of foreign tourists in the scenic spot. “Appreciation” and “learning” shows that the tourism of Shaolin Temple is both ornamental and learned experience in the minds of foreign tourists. Tourism activities in the scenic spot should focus on kung Fu and expand tourists' diversified experience.

B. Semantic Network Analysis

Although high-frequency lexical analysis is important, it can only reflect the characteristics of things in the main fields, and cannot reflect the semantic connection of phrases and the deeper structural relationship of the text [9]. Guided by the “cognitive emotion” model of foreign tourists' tourism experience, and referring to the analysis framework of previous tourism image research, this paper uses Rost CM to make a social semantic network map of foreign tourists' evaluation of Shaolin Temple.

TABLE II: SOCIAL SEMANTIC NETWORK ANALYSIS

walk	bus	cable	enjoy
Kung fu	Pagoda forest	show	performance
monks	Shaolin Temple		Interesting
time	school	guide	disappointed
Luoyang	training	walk	Buddhism

First of all, according to the rules of the social semantic network analysis chart Table II, the closer the word is to the central node, the closer the relationship is to the node [10]. “China-Shaolin Temple” and “China- Shaolin martial arts or kung fu” are the two key semantic relation chains that constitute the whole semantic network. The image of Shaolin Temple in the chart of foreign tourists is the image of Shaolin Temple. Shaolin Kung Fu and Buddhist culture of Shaolin Temple are the symbolic tourist attractions of Shaolin Temple.

Secondly, in the semantic network with the central node, foreign tourists mainly focus on “learning, training, practicing” Kung Fu, and “watching, visiting” Kung Fu performances; As well as the “scenic area bus, cable car, walking” supporting infrastructure construction of Shaolin Temple and the regional and geographical location of Shaolin, as well as the transportation mode from Luoyang, Xi’an and other tourist destinations to Shaolin Temple scenic spot. In addition, English tour guide service is also the focus of foreign tourists. The semantic network diagram shows more intuitively the goals and expectations of foreign tourists in Shaolin temple tourism, which is obviously different from domestic tourism, and is the top priority of the international development of Shaolin Temple.

C. Coding Analysis of Poor Evaluation

Overall review degree – four stars	737 reviews
Excellent	265
Very good	270
average	149
Poor	35
terrible	17

First of all, combined with TripAdvisor's feedback and rating evaluation of 776tourists,535 five-star and four-star positive reviews, 149 medium reviews and 52 poor reviews were evaluated by TripAdvisor. And then we use the Rost CM analysis software and found that 73.50% of foreign tourists' emotions towards Shaolin Temple are positive, and neutral emotion and negative emotion accounted for 14.50% and 12.00% respectively, and the positive emotion data was about 6 times of the negative emotion data. This proves that foreign tourists' tourism image of Shaolin Temple scenic spot is mainly positive, but there are still 20l negative comments.

TABLE III: EMOTIONAL DISTRIBUTION

Emotional tendency	Proportions (%)	strength	proportions (%)
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positive	73.50%	Common	32.50%
		mediate	21.00%
Neutral	14.50%	High	20.00%
negative	12.00%	common	9.00%
		mediate	2.50%
		high	0.00%

In Table III, compared with the positive emotions of tourists on the tourism image of Shaolin Temple, the negative emotions analyzed in the comments deserve more attention, and it is worth further studying the factors restricting the development of scenic spots. In addition, it is necessary to evaluate the tourist attractions of Shaolin in terms of both the advantages and disadvantages of the tourist attractions, and to improve the development of the tourist attractions.

D. Tourism Image Category

In order to further study the international development of Shaolin Temple and shape its unique tourism image, this article summarizes and classifies 90 high-frequency words, and classifies the tourism image category of Shaolin Temple into four main categories, namely, location division, tourist attraction, Infrastructure construction and scenic spot management and service.

TABLE IV. TOURISM IMAGE CATEGORIES

Tourism image/ Ratios of frequently used words	High frequency vocabulary
1. Location 15 (11.1%)	Place, area, bus, China, Luoyang, way, back, tour, Zhengzhou, train, Deng feng, driving, Longmen Grottoes, Henan, Song Shan
2. Tourism attractions/2 5 (27.8%)	Shaolin, show, Kung Fu, see, visit, monk, Chinese, Pagoda forest, park, mountain, history, training, students, site,martial arts school,performance,song, attractions, Zen, film, Buddhism, famous, good, Cave, culture
3.Infrastructure construction/ 7 (7.8%)	walk, way, cable, hike, park, complicated, shoes
4.Management and service / 43 (47.8%)	time, worth, day, like, great, nice, rmb, visitors, guide, beautiful, hours, experience, tickets, interesting, famous, kids, recommend, impressive, ee, English, different, price, crowded, commercialized, group, food, enjoy, miss, shop, learn, prepared, disappointed, couple, local, sell, expensive, expect, fascinating, morning, souvenir, wonderful, air, fun

In Table IV, based on the analysis of high-frequency words in Shaolin Temple, social semantic network analysis of high-frequency words and tourism image category analysis, we can see the distribution imbalance of the four main categories-location division, tourism attractions, infrastructure construction level and scenic area management and service. Tourism management and service ranked the

first, which accounted for the largest proportion of foreign tourists' tourism image category. Shaolin Temple with high international reputation ranked second among foreign tourists. The Tourism Division category of Shaolin Temple surpasses infrastructure construction and ranks third. Infrastructure construction vocabulary ranked at the bottom, accounting for only one sixth of the vocabulary of scenic area management and service.

IV. CONCLUSION

On the one hand, it shows that the management and service within the scenic area account for a great deal of decisive factors of foreign tourists. The international famous brand effect is of course important, but if the management and service are not up to standard, more foreign tourists cannot be attracted to visit. On the other hand, the geographical location of scenic spots is also a key factor. Luoyang appears 76 times in the first 90 high-frequency words. Combined with the original text of foreign tourists' evaluation, foreign tourists generally choose group tour in China. Luoyang Longmen Grottoes scenic area, which is also a world cultural heritage, is only 1.5 hours' drive away from Shaolin Temple scenic spot, which is a chain scenic spot chain that foreign tourists choose more. Zhengzhou appears 32 times and it shows that the developed and convenient transportation of the provincial capital city enables tourists from outside to the inside and surrounding scenic spots by plane, high-speed rail and train. It shows that the development of well-known scenic spots in one city can promote the development of surrounding scenic spots in other cities in recognition of foreign tourists.

All in all, the international development of Shaolin Temple must attach great importance to foreign tourists' goals and perception characteristics of the tourism image of Shaolin Temple, so as to create a distinctive road of sustainable development.

CONFLICT OF INTEREST

The author declares no conflict of interest.

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