

## Research on Tourism Image Perception of Xiangshan Park Based on Web Text Analysis

Xiaoling Li\*, Yonghui Sun

*Guilin University of Technology School, Tourism and Landscape Architecture, Guilin, Guangxi, China* \*Corresponding author: 1301661368@qq.com

#### Abstract

A good tourism image is not only the basis for customers to choose tourism destinations, but also an important basis for tourism destinations to maintain the source of tourists. This paper uses the Octopus collector to collect tourist travel notes on Meituan Travel Network as a data sample, and uses ROST content Mining as a tool to conduct word frequency analysis and sentiment analysis of tourist travel notes in Xiangshan Park. The study found that Guilin Xiangshan Park has problems such as outdated equipment and facilities, poor personnel management, irregular fare formulation, and poor sanitation. On this basis, five suggestions are put forward to scientifically locate the image of scenic spots, maintain scenic facilities on a regular basis, strengthen personnel management, reasonably adjust fares, and strengthen hygiene management.

Keywords: network text analysis; Tourism image; Image perception; xiangshan park

#### **1.INTRODUCTION**

According to the 49th "Statistical Report on Internet Development in China" released by the China Internet Network Information Center, as of December 2021, the number of Internet users in my country reached 1.032 billion, an increase of 42.96 million compared with last year. With the proposal of the "Internet +" national strategy of the 12th National People's Congress, all walks of life are actively integrating with the Internet, and the Internet has become the standard for industrial progress and development in the new digital era. The deep integration and development of the Internet and traditional tourism has become an irresistible trend of the times. Today, most tourists are willing to record their travel experiences and share their travel feelings on social networking platforms. The Internet has become an information channel for disseminating and exchanging destination tourism-related information, and various tourism software has also become a medium for tourists to convey their tourism emotions. Based on this, this paper uses the method of network text analysis to discuss the tourist destination image of Guilin Xiangshan Park. This paper hopes to provide some suggestions for the optimization of Xiangshan Park scenic spots, and also provide reference suggestions for related tourist attractions.

#### **2.LITERATURE REVIEW**

The term tourism image was first proposed by the scholar Hunter in the 1970s, who believed that the tourism destination image was people's impression of nonresidential places [1]. Pike (2002) believes that most people's perceptions and impressions of tourist destinations are affected by other external and personal factors, so perceptions vary from person to person and are temporal [2]. Therefore, the image of a tourist destination is difficult to measure. In recent years, relevant scholars have collected destination tourism information through Internet data and various tourism software information to measure the image of tourism destinations. For example, Li Ping (2017) conducted a qualitative study on Beijing's tourism community by collecting tourist evaluations from Baidu Travel, Ctrip and other institutions with the help of text analysis method [3]. Similarly, Li Yong et al. (2018) used the content analysis method to analyze the text information in the form of "tourism issues" to explore the demand characteristics of tourists in Jiuzhaigou scenic spot [4]. Liu Bingqian (2021) used the network text analysis method to explore the image perception characteristics and conditions of tourists in Shanghe Garden during the Qingming Festival [5]. Some scholars also discuss the topographic image of tourism destination from the perspective of grounded theory. For example, Zhao Qian (2019) analyzed Changsha's tourism image perception from three dimensions: cognitive image, emotional image and overall image based on content analysis and grounded theory [6]. Fang Tianhong et al. (2020) used text analysis and grounded theory to analyze the image and influencing factors of Shanghai Tianzifang [7]. Most online texts are based on various tourism software reviews as data sources, and a few scholars turn their eyes to other social fields. For example, Xiang Jin et al. (2020) used Sina Weibo as the data source to analyze the tourism image of Xi'an at the two levels of evaluative tourism image and structural tourism image through content analysis, semantic network analysis and kernel density estimation [8]. By combing the literature, it is found that most of the topographic image survey of tourism destinations are aimed at popular tourist cities or popular scenic spots, while there is little research on Guilin scenic spots, which has a great vacancy.

### **3.Research Design**

#### 3.1. Research methods

Content analysis is a research method for objective, systematic and quantitative description of dissemination content. Its essence is the analysis of the amount of information contained in the dissemination content and its changes, that is, the process of inferring the precise meaning from the meaningful words and phrases represented. The process of content analysis is a process of layer-by-layer reasoning. The reason why content analysis is called a combination of qualitative and quantitative analysis methods is that it first conducts statistics, classification and organization of the obtained materials, and then the experimenters comprehend, experience and analyze the obtained material information. The main function of ROST CM6 network text analysis software is to perform word frequency statistics, network and semantic analysis, and sentiment analysis on the obtained network text. This paper uses the ROST CM6 text analysis software to analyze the online text of Guilin Xiangshan Park, so as to obtain the attitude and cognition of tourists to the scenic spot.

### 3.2. Case selection

Guilin Xiangshan Park is located at the intersection of Lijiang River and Taohua River, with a total of 118,800 square meters. It is the representative work of Guilin landscape. In 1986, Guilin built Xiangshan Park on the basis of Elephant Trunk Hill. Among them, Elephant Trunk Mountain is named after the whole mountain contour looks like an elephant standing at the drinking place of the Lijiang River, and is referred to as Elephant Mountain for short. Elephant Mountain is 220 meters above sea level and about 55 meters above the water surface. It consists of pure limestone deposited on the seabed 360 million years ago. In addition to Elephant Trunk Hill, there are also important scenic spots in the park, such as Puxian Pagoda, Yunfeng Temple, and Exhibition Hall of the Revolutionary Ruins of the Taiping Heavenly Kingdom for tourists to visit. In 2017, the Xiangshan Park Scenic Spot and the Two Rivers and Four Lakes Scenic Spot were jointly upgraded to a national AAAAA-level tourist scenic spot.

#### 3.3. Data collection and processing

According to the official website of meituan, as of December 31, 2021, the number of transaction users of meituan was 690 million, an increase of 35.2% over 510 million in the same period last year. Nowadays, meituan tourism network has been integrated into public life, and most people take it as the first choice when traveling. Based on Meituan's rich customer base, the reviews are authentic and reliable. Therefore, using the evaluation of Meituan Xiangshan Park as the data source can vividly reflect the feelings of tourists. Since there are many travel notes and reviews about Xiangshan Park on this website, for the convenience of collecting online texts, the Octopus collector is used to collect data from January 2018 to January 2022. In order to ensure the authenticity and reliability of the samples, the collected samples are processed as follows: (1) Ensure that the text content is related to the scenic spot of Xiangshan Park, and remove advertising information that is not related to the scenic spot of Xiangshan Park; (2) Remove excessively similar and repetitive information; (3) Remove automatic online comment information. After processing and screening the text information, 4,609 pieces of text were finally selected from the 9,407 pieces of text information initially collected, with a total of 143,574 words.

#### **4.DATA ANALYSIS RESULTS**

### 4.1. Analysis of high-frequency feature words

Firstly, the obtained text data is converted into TXT file, and then 4609 texts are word-segmented by ROST CM6 software. Finally, high-frequency feature words are obtained by word frequency statistics. In order to ensure the accuracy of the obtained high-frequency feature words, this paper obtains the top 20 high-frequency words related to the perception of tourism image in Xiangshan Park by continuously improving the word segmentation dictionary and filtering dictionary. As shown in Table 1.

 
 Table 1 High-frequency words in tourism image perception of Xiangshan Park

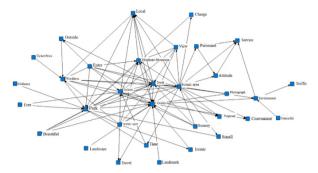
	High-			High-	
seque	frequen	frequ	seque	freque	frequ
nce	су	ency	nce	ncy	ency
	words			words	
1	Scenic	729	11	service	223
	spot				

2	Tickets	634	12	conveni ent	184
3	Park	565	13	hours	179
4	Elephan t Trunk Hill	537	14	Sugges t	169
5	Worth	380	15	photog raph	158
6	Scenery	334	16	general	151
7	places	299	17	charge	142
8	Well	255	18	Landsc ape	139
9	environ ment	242	19	Travel	137
10	scenery	236	20	Fare	137

The frequency of word occurrences reflects tourists' attention and perception of intentional elements. Among them, words related to the natural landscape of the scenic spot, such as "landscape"," scenery "appear more frequently, indicating that the tourists' attention to the object mountain park mainly focuses on the natural scenery of the scenic spot. In addition, the frequency of ticket prices is second only to the positioning words of scenic spots, which shows that tourists pay more attention to the cost-effectiveness of tourism. In terms of the evaluation of Xiangshan Park, the adjectives with positive meanings such as "worthwhile", "ok", "suggestion", "general", "punch the clock" and "happy" account for a large proportion, indicating that the overall satisfaction of tourists is high and Xiangshan Park has a good tourism image. In terms of personnel management of scenic facilities, the frequency of "service" is 223 times, the frequency of "personnel" is 99 times, and the frequency of "facilities" is 93 times, which reflects the importance that tourists attach to their management and the facilities in the park.

#### 4.2. Social Semantic Network Analysis

Simple word frequency statistics can see the main concerns of tourists, but social semantic network analysis can analyze the hidden meanings between various words. In the analysis of social semantic network, the thickness of the line represents the frequency of co-occurrence. The thicker the line, the closer the location of the two, indicating that the higher the co-occurrence frequency between the two, the closer the correlation of related concepts in tourists' cognition. Through the functional analysis in Rost CM6 software, the visual graphics are obtained. As shown in Figure 1.



97

Figure 1 Semantic network analysis of Xiangshan Park

The rule of Semantic Network Analysis Graph is to reveal the closeness of each vocabulary through the distribution of nodes. "Elephant Trunk", "Guilin", and "Ticket" are the three convergence nodes of the entire network. This area is the central area where all highfrequency words are most closely connected, indicating that Elephant Trunk Hill is a characteristic attraction of the entire Xiangshan Park; The intermediate nodes include "Elephant Mountain", "Park", and "Scenic Spot", mainly for the geographical location of the scenic spot; the nodes at the edge include "worthless", "outside", "beautiful", "scenery", etc., reflecting tourists' views. The feeling of the natural landscape during the garden; At the very edge, it includes "service", "personnel", "attitude", "small", "suggestion", etc., which is the tourist experience evaluation of the personnel and facilities of the object mountain park. On the whole, the perceived image of the object mountain park for tourists mostly feels its scenery and infrastructure through observation from the outside to the inside, but lacks the feeling of the cultural landscape of the destination.

#### 4.3. Sentiment Analysis

Tourists' emotional perceptions reflect tourists' satisfaction with tourist destinations. By analyzing the emotional tendency of tourists towards Guilin Xiangshan Park and its causes, it can be used to guide Guilin Xiangshan Park to improve the quality of tourism products, which can not only play a constructive role in the scenic spot, but also improve the image of the scenic spot. Use ROST Content Mining software to perform sentiment analysis on the text, and the emotional analysis dictionary is used as a reserved word list to extract highfrequency emotional words. The high frequency emotion words are classified to analyze the emotional attitude tendency of the data. According to statistics, the emotional experience of tourists in Xiangshan Park scenic spot is general, with positive emotions accounting for 55.25%, neutral emotions accounting for 15.43%, and positive emotions accounting for 29.31%. As shown in table 2.

emotion type	Quantity/Article	percentage%	Degree type	Quantity/Article	percentage%
positive emotions	426	55.25	General (0-10)	232	30.09
			Moderate (10-20)	125	16.21
			Height (above 20)	69	8.95
neutral mood	119	15.43			
Negative emotions	226	29.31	General (0-10)	159	20.62
			Moderate (10-20)	46	5.97
			Height (below -20)	6	0.78

Table 2. Statistics of sentiment analysis results of online comments in Xiangshan Park

It can be seen from the data that positive emotions and neutral emotions account for the majority, accounting for 70.69%. It shows that most tourists are satisfied with the itinerary of Xiangshan Park. The positive emotion result document shows that its positive emotion is mainly reflected in the scenic spot management, scenic spot landscape, service facilities and so on. For example, "the management is standardized, the scenery is beautiful, and the landmarks of Guilin must be punched in", "the service facilities are also good, the greening is very comfortable", "the environment is very good, the movie is very good, we recommend it to sisters who want to take pictures". It is consistent with the picturesque scenery created by Xiangshan Park scenic spot, which reflects the beautiful scenery of Xiangshan Park. In the negative sentiment result file, "the park is relatively small", "too commercialized", "the stuff inside is ridiculously expensive", "the signs are not clear", "the attitude of the service staff is too bad", "only the observation deck can be used when it rains", In the negative emotion result document, "the park is relatively small", "too commercialized", "the things inside are really expensive", "the signboard is not clear", "the attitude of the service staff is too poor", "heavy rain and rising water, only one viewing platform is open", which reflects the imperfect internal mechanism of Xiangshan Park, the market price needs to be adjusted, the measures of the scenic spot at different times are not in place, and the relevant services are not perfect. It is precisely because of these problems that the tourist satisfaction of Xiangshan Park has declined, its tourism image in the minds of tourists has been greatly reduced, and the overall reputation of Xiangshan Park has been poor.

## 5.CONCLUSIONS AND RECOMMENDATIONS

## 5.1. Conclusion

From the analysis of tourists' online text comments in Xiangshan Park, it can be seen that most tourists have a positive attitude towards the perception and experience of the tourist image of the scenic spot, and the overall satisfaction is high, while a few tourists have a negative attitude towards the tourist image of the scenic spot. The main reasons for the low image satisfaction of the scenic spot are as follows: (1) The commercialization of the scenic spot is serious, which is easy to cause visual fatigue of tourists. (2) The facilities of the scenic spot are too outdated, and the service of the scenic spot management personnel is poor. (3) The scenic spot is greatly affected by the weather, and excessive drought or too much water led to poor tourist experience. (4) The price of tickets for the scenic spot is unreasonable and does not meet the expectations of tourists. (5) The sanitation of the scenic spot is not good, which reduces the interest of tourists. Therefore, for Xiangshan Park, it is urgent to adjust and transform its scenic spot.

## 5.2. Recommendations

# 5.2.1. Scientifically locate the image of scenic spots and avoid blind development

Guilin has always been famous for its landscapes. As one of the scenic spots in Guilin, most people visit Xiangshan Park for the purpose of clocking in and taking photos. Therefore, we should dilute its commercial image and maintain the natural landscape. The positioning of the scenic spot should not only be based on customer needs, but should be adjusted in time according to the landform, resources and business conditions of Xiangshan Park. According to the local culture of Xiangshan Park, create a style that is different from other scenic spots, and form a scenic spot positioning that not only meets customer needs but also resists market competition. Nowadays, most scenic spots are similar with small differences, and only by positioning the scenic spots well can they show their differentiated characteristics and reflect the culture of the scenic spots.

# 5.2.2. Regularly maintain scenic facilities and strengthen employee management

Infrastructure is the basic condition for the development of the scenic spot, and it is more conducive to the development of the tourist image of the scenic spot. The guiding signs of Xiangshan Park shall be rectified to make them recognizable and clear. At the same time, increase the rest places for tourists and strengthen the patrol management. Employees can be trained in the following two aspects: one is to establish employees' service awareness, starting from the basic quality and management of employees; the other is to conduct irregular training for them, so that they can change from passive service to active service. In addition, provide more personalized, humanized and family-friendly services for tourists, help tourists solve various problems as much as possible, and resolutely put an end to the reduction of service quality due to the reduction of tourists

## 5.2.3. Real-time adjustment according to the weather, flexible arrangement of scenic spots

Because the weather is an uncontrollable factor, the Xiangshan Park scenic spot relies on water to attract customers. Actively adjust the scenic spot projects in the dry season and the busy season to reduce tourists' dissatisfaction with the weather, so as to make tourists feel happy and have greater tolerance. During the dry season, Chaoyang Pavilion, Elephant Eye Rock, Puxian Tower and Yunfeng Temple in Xiangshan Park Scenic Spot can be used as the main propaganda items for tourists to watch. During the peak water season, water cruises can be carried out to allow tourists to appreciate the beauty of the Li River. In terms of marketing, large-scale publicity and marketing are carried out in the peak season, and a comprehensive tightening marketing strategy is adopted in the off-season. By cooperating with travel agencies to promote the price advantage and rebate policy of group purchases in the freshwater season, travel agencies can be stimulated to send groups to the scenic spot.

## 5.2.4. Reasonably adjust the ticket price of scenic spots and increase the tourist demand of tourists

The price of scenic spots should respect market demand. When tourists feel that the fare does not meet their expectations, they are naturally discouraged. Therefore, according to its current investment cost, passenger flow and market consumption level, the Xiangshan Park can reasonably adjust the fare to meet customer needs and increase passenger flow. When the passenger flow increases, the scenic spot can improve the experience of tourists and win customer satisfaction by providing rich tourism products and high-quality tourism services. In this way, a good regional tourism brand image can be created for enterprises in tourist attractions and effectively stimulate greater tourism market demand.

## 5.2.5. Strengthen the sanitation management of scenic spots, and patrol the scenic spots regularly

When tourists enter the scenic spot, the first thing they feel is the sanitary condition of the scenic spot. The quality of the sanitary condition will affect the overall feeling of tourists visiting the scenic spot. Sanitation management is one of the most basic tasks in scenic spot management, which reflects the management system of the entire scenic spot and is an important guarantee for maintaining the overall tourism image. Scenic spots can set up sufficient and reasonable garbage containers, and clear, transport and dispose of garbage in a timely manner. Special personnel will be set up to patrol the scenic spot at regular intervals to ensure the safety of tourists and the cleanliness of the scenic spot, so as to create a comfortable and beautiful feeling for tourists.

## REFERENCES

- HUNT J D. Image as a Factor in Tourism Development[J]. Journal of Travel Research, 1975, 13 (3): 1-7.
- [2] Pike s. Destination image analysis: A review of 142 papers from1973 to 2000[J]. Tourism Management, 2002, 23(5):541-549.
- [3] Li Ping, Chen Tian, Wang Fuyuan, et al. Research on image perception of urban tourism community based on text mining—taking Beijing as an example [J]. Geographical Research, 2017, 36(6): 1106-1122.
- [4] Li Yong, Liu Liming, Ru Hongrun. Research on Tourism Information Demand Based on Content Analysis: Taking Jiuzhaigou Scenic Spot as an Example [J]. Research World, 2018(8):59-65.
- [5] Liu Bingqian. Research on the perception of tourism image of Shanghe Garden in Kaifeng Qingming Festival based on network text analysis [J]. China Business Review, 2021(13):46-48.
- [6] Zhao Qian, Wen Yanping Research on terrain image perception of tourism destination in Changsha Based on network text [J] Hubei agricultural science, 2019,58 (19): 102-108
- [7] Fang Tian Hong, Xu Xiao Wu Image perception analysis of Shanghai Tianzifang based on network text [J] Jiangsu business theory, 2020 (3): 62-66
- [8] Xiang Jin, suonan Qu, Zhen Zhuoma, Zhao Dixian Research on Xi'an tourism image based on network text analysis [J] Hubei agricultural science, 2020,59 (23): 216-221237

100 X. Li and Y. Sun

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http:// creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

