A Comparative Study on Cultural Perceptions of Domestic and Foreign Groups Regarding World Heritage Sites

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Abstract: Utilizing network text analysis approach, this study collected visitors' reviews pertaining to Mount Emei from the official websites of Ctrip and TripAdvisor, and then proceeded to study the cross-cultural services and differences of cultural perceptions of Chinese and foreign tourists. This involved performing word frequency statistics, semantic analysis, and sentiment analysis. The ROST Emotion Analysis Tool was specifically employed to examine the emotional tendencies exhibited by the tourists. It is found that Chinese tourists predominantly focus on their personal experiences, foreign tourists tend to emphasize the tourist attractions. Notably, both groups maintain positive emotional attitudes towards their visits to the world heritage site-Mount Emei. With the increasing number of exchanges and collaborations between cities in China, the significance of multilingual services in addressing language barriers and enhancing the internationalization of cities cannot be overstated.

Keywords: Cultural Perception, Online Reviews, Word Frequency, Multilingual Services

1. Introduction

In the era of Internet, visitors are able to share their travel experiences and feelings in real-time, resulting in a large amount of online review information that is widely covered, highly authentic, and timely. The satisfaction of tourists' experiences is largely determined by their perception of the destination's culture and language services. Leshan City, with its rich and diverse cultural heritage, attracts tourists who are motivated to experience the cultural charm of the heritage site and fulfill their inner desire for exposure to different cultures. Cultural heritage tourism is fundamentally a spiritual and cultural activity[1-2], it is worthwhile to study the cultural perception differences that Chinese and foreign tourists have on world heritage sites, as well as whether these differences trigger distinct emotional expressions [3]. This would also reflect the current state of international language services. The mass data of online reviews allow for an objective and comprehensive presentation of tourists' perceptions and attitudes [4], thereby helps to conduct a more accurate study of travel preferences, emotional characteristics, and evaluations of language services from the tourists' perspective.

In recent years, the study on tourist perception regarding the tourism image has advanced considerably due to the abundance of tourist review data. Somes scholars have employed web text analysis methods to investigate the perceptions of the tourism image of destinations among visitors. For instance, Mao (2012) examined the relationship between cultural perception of world heritage sites and tourists' intention to revisit, focusing on the West Lake in Hangzhou [5]. Qiu (2017) utilized a questionnaire to assess the cultural perceptions of Taishan's scenic spots, and examined the factors that impact tourists' cultural perceptions [6]. Additionally, Yang (2019) analyzed the dissimilarities in Chinese and foreign tourists' perceptions of the tourism image of West Lake scenic area in Hangzhou before and after the G20 Summit [7]. However, these studies have several limitations, such as the scarcity of research on cultural perceptions of tourists in world heritage sites, the majority of existing studies are questionnaire surveys, and the absence of a comparative analysis of cultural perceptions between Chinese and foreign tourists based on online data analysis. Therefore, this study aims to fill this gap by collecting data of online visiting reviews and examining the cultural perception of Chinese and foreign tourists visiting Mount Emei, a world heritage site. The study will collect data on the cross-cultural perception, analyze the high-frequency words and emotional attributes in the comments, and then create a semantic network map to reveal cultural perception. The findings will provide insights into the differences in cultural perception and language service evaluations between Chinese and foreign tourists and also be

valuable for improving the quality of international language services in Leshan.

2. Method and Data

2.1. Research Object

Emei Mountain, situated in the southwest of Sichuan Province, China, has been revered since ancient times as "Pu Xian, the eldest son of Buddha, and Emei, the leader of the mountain", and is located near the enigmatic latitude of 30°N. Emei Mountain's natural heritage is exceedingly abundant, and has earned the titles of the natural "plant kingdom", "animal paradise" and "geological museum". Its cultural heritage is equally profound, as it serves as a sacred Buddhist site in China, known as the "paradise of Buddha", and is the dojo of the Bodhisattva Pusheen. This site is inscribed on the UNESCO World Cultural and Natural Heritage List, and is renowned for its "majestic, beautiful, divine, strange and spiritual" natural landscapes and deep-seated Buddhist culture.

2.2. Research Method

Currently, the network text analysis method is widely used to study how people perceive the cultural aspects of tourism image.The researcher in this study utilized Octopus data collection software to gather user reviews about Emei Mountain from the official websites of Ctrip and TripAdvisor. The data collection spanned from January 2020 to December 2022 and resulted in a total of 2830 user reviews. After removing 32 irrelevant and duplicate reviews, 2794 valid reviews were obtained and transformed into proprietary text files. The ROST CM6.0 analysis software was partially employed to analyze the collected user review data. Specifically, the researchers conducted word separation and frequency statistics to identify high-frequency words related to the cultural perception of tourists in Mount Emei. Additionally, a high-frequency word cloud map was generated using micro word cloud software. The study categorized the high-frequency words based on their attributes and performed statistical analysis to compare the cultural perceptions and language services evaluations of Chinese tourists and foreign tourists. Through this analysis, the study aimed to uncover the differences in cultural perceptions of Leshan City and the evaluation of language services between Chinese and foreign tourists at a cross-cultural level.We only accept papers written in English and without orthographic errors.

3. Research content

3.1. Analysis of cultural perception differences from Chinese tourists' reviews

By utilizing the custom word list function, this study has successfully integrated and rectified inappropriate words such as "Puxian" and "Bodhisattva" into "Puxian Bodhisattva", Harmonization of "English interpretation"and "foreign language guides" into "foreign language services". In addition, words with insignificant meanings were deleted. The statistical analysis of word frequencies was conducted, and the top 100 nouns were selected. Among the high-frequency words in the text of visitors' reviews, the top 10 high-frequency words include "Mount Emei", "Golden Peak", "scenery", "very good", "ropeway", "monkey", "attraction", "Leidongping", "cable car", and "sunrise". The study reveals that the picturesque scenery of Mount Emei has been highly appraised by tourists, with the high-frequency words ranking at the top highlighting the core attractions and special features of Mount Emei. Furthermore, the "ropeway" serves as the primary mode of transport for tourists to ascend the "Mount Emei" and "Golden Peak". We can see from Table 1 that tourists' reviews mainly focus on the overall experience of Mount Emei, core attractions, tourism services and facilities.

To gain a deeper understanding of how tourists perceive Mount Emei, this study draws on the analysis methods of Yang (2017) and He (2019) et al. regarding the categories of tourism image attributes [8-9], and the high-frequency words in Table 1 are divided into four aspects for analysis according to the image perception categories: characteristics of overall tourism image, tourism attraction, environment and service facilities, and touring experience. Based on the findings presented in Table 2, it is evident that the category pertaining to the cultural perception of Mount Emei among tourists exhibits the highest proportion of high-frequency words. This is followed by the categories of tourist attraction and tourist environment and service facilities, respectively. Lastly, the overall characteristics of the tourism image are presented.

Table 1: High frequency feature words of Chinese tourists' review towards Mount Emei (top 100)

Words	Freq	Words	Freq	Words	Freq	Words	Freq	Words	Freq	Words	Freq
Emei Mountain	1542	Hotels	147	Jieying Temple	80	Motion sickness	55			Not bad	44
Golden Peak	1033	Qingyin Pavilion	135	Beautiful scenery	80	beautiful scenery	54			Beautiful	42
Scenic view	795	Experience	134	Parking lot	79	Shock	54			Walking	41
Very good	595	Sightseeing Car	133	Very beautiful	177	Staff	53	Very beautiful	40	Bus	76
Ropeway	447	Walking	129	ID	77	A line of sky	53			Clouds	76
Monkeys	359	Tourists	221	physical strength	77	sacred place	52			Clouds	76
Attractions	489	China	118	Cost effective	76	Value for money	52			Ticketing	38
Leidongping	340	Superb	115	Recommendable	75	Excursions	52			Sightseeing	37
Cable car	309	Mountain Climbing	114	Mountain road	69	Luck	51			Snow	37
Sunrise	288	Altitude	111	Price	68	Terrain	50			Religion	35
Sea of Clouds	250	Tour	223	Snowy scenery	67	Foot of the mountain	50			Fun	35
Convenience	230	Queuing	108	Spectacular	67	Climbing to the top	50			Great	35
Tickets	226	Rain	104	Chengdu	62	Station	49			The trip was worth it	35
Very good	219	Bus	95	Steep	59	Fuhu Temple	49			Wonderland	34
Buddhism	202	Temples	88	Accommodation	58	Itinerary	93			Scenery	34
Pusheen Bodhisattva	189	Culture	87	Regret	57	Transportation	46			Ecology	33
Famous mountain	171	Buddha's Light	87	Beautiful	57	By car	45			Route	32
Hiking	162	Sichuan Province	177	Leshan	57	Climbing	45			Air	32
Baoguo Temple	150	Taoist Temple	84	Service	56	Environment	44			Routes	31
Weather	149	WuXianGang	81	High-speed rail	55	Ticket	44			Snowy Mountains	30

Table 2: Cultural perception image classification of Chinese tourists regarding Mount Emei

Category	Words
Characteristics of overall tourism image	Mount Emei, scenic spots, famous mountain, temples, culture, dojo, holy places, religion, fairyland, snowy mountains, Buddhism, Pusheen Bodhisattva
Tourism attraction	Golden Peak, scenery, monkeys, Leidongping, sunrise, sea of clouds, Jinguo Temple, Qingyinge, climbing mountain, Buddha's light, Wuxiangang, Jining Temple, snow, beautiful scenery, first-line sky, Fuhu Temple, clouds and mist, scenery, ecology, air
Tourism environment and service facilities	ropeway, cable car, hiking, weather, hotel, sightseeing bus, queue, bus, parking, accommodation, service, high speed rail, staff, station, transportation, driving, bus, ticket, tickets
Tourists' touring experience	very good, experience, awesome, tour, scenic, very beautiful, physical, recommendable, spectacular, regret, beautiful, motion sickness, shocking, tour, summit, mountaineering, okay, beautiful, very pretty, sightseeing, snow, fun, great, not a bad trip, good value for money

The overall tourism image characteristics: the high-frequency words "attractions", "famous mountain", "temples", "culture", "dojo", "sacred place" "religion", "fairyland", "snowy mountain" represent the overall image of Mount Emei World Heritage Site, indicating that Mount Emei is a religious holy place with rich Buddhist culture as the representative scenic spot of Leshan City, and is the "dojo" where "Pusheen Bodhisattva" practiced. The numerous historical "temples" and the "snowy mountains" and "fairyland" contribute to the overall perception of Mount Emei by visitors.

Tourism attraction: Tourism attraction is one of the elements of tourism products, which can attract tourists and determine their decision-making behavior. The core tourism attraction of Mount Emei is composed of a large number of cultural relics and beautiful natural scenery. Cultural tourism attractions include: Golden Peak, Leidongping, Newspaper Temple, Qingyinge, Buddha's Light, WuXianGang, Receiving Temple, One-Line Sky, Fuhu Temple; natural tourism attractions include: scenery, monkeys, sunrise, sea of clouds, climbing mountains, snow, beautiful scenery, clouds, scenery, ecology, air.

Tourism environment and service facilities: The frequent usage of terms such as "ropeway", "cable car", "bus", "sightseeing bus", "station", "transportation" are indicative of the modes of transportation that are commonly employed by tourists during their visit to Mount Emei. Additionally, terms "foreign language signage", "bilingual tour guide", "hotel", and "accommodation" indicate the capacity of the tourist services available at the scenic spot, which is often frequented by tourists who prefer to stay for an extended period of time to appreciate natural marvels such as the sunrise. The presence of the "high speed railway" serves as a testimony to the improved external accessibility of transportation to Mount Emei. Moreover, the online electronic ticket reservation systemoffered by Mount Emei enhances the convenience of visitors, which adds to the appeal of the site and the availability of mutilingual language guide offers a high level of convenience to visitors. However, online reviews indicate that there is still a

certain degree of inconsistency and lack of standardization in foreign language signage within the scenic area.

Tourists' touring experience: As evidenced by the high frequency of positive evaluations made by tourists, Mount Emei emerges as a prominent destination. The tourists' feedback highlights the scenic beauty of the place, with words like "picturesque", "magnificient", "spectacular", "stunning", "beautiful" being commonly used to describe the natural landscape. Additionally, terms such as "very good", "good", "superb", "fun", "great", "unforgetable journey" aptly convey the tourists' overall satisfaction with the quality of their visit. However, the vastness of Mount Emei, with its multiple mountain roads, may cause discomfort to some visitors, leading to a feeling of seasickness. Similarly, inclement weather may prevent tourists from experiencing the most alluring aspects of Mount Emei, resulting in regrettable missed opportunities.

3.2. Analysis of cultural perception differences from foreign tourists' reviews

The study involved the extraction of high-frequency words from user reviews of Mount Emei on the official TripAdvisor website. Due to a relatively small number of reviews from foreign tourists in comparison to Chinese tourists, the top 100 high-frequency words were selected for analysis, a high-frequency word table was generated based on the selected words, as presented in Table 3. And a high-frequency word cloud map of foreign tourists' reviews on Mount Emei is formed, see Figure 1. The cultural perception of foreign tourists visiting Mount Emei was analyzed in four dimensions, namely overall tourism image characteristics, attraction to tourism, tourism environment and service facilities, and the tourist's tour experience.

Table 3: High frequency feature words of foreign tourists' review towards Mount Emei (top 100)

Words	Freq	Words	Freq	Words	Freq	Words	Freq
mountain	364	tickets	116	ride	62	rooms	43
bus	359	climb	112	monasteries	61	Wannian Temple	42
car	269	China	109	sunrise	60	winter	41
cable	259	golden top	105	train	59	park	41
walk	257	buddha	100	steps	59	water	40
hike	251	beautiful	89	snow	54	nice	38
temples	206	stairs	87	great	54	cold	37
Mount Emei	194	good	85	amazing	53	route	36
see	176	hotel	79	Leidongping	51	hard	35
summit	172	food	78	rain	48	bottom	34
RMB	140	tourists	73	peak	48	clear	32
station	131	worth	73	weather	47	cover	31
view	125	clouds	71	statue	46	expensive	28
trip	118	experience	67	crowds	45	small	27
monkeys	118	Chengdu	66	Baoguo Temple	44	foggy	26
visit	116	stop	63	entrance	43	different	24

The present study examines the tourism image characteristics of the World Heritage Site of Mount Emei from the perspective of Chinese and foreign tourists. The findings suggest that the high-frequency words, such as "Leshan", "Mount Emei", "monasteries", "temples" and "buddha" are indicative of the overall image characteristics of foreign tourists towards the site. Interestingly, no significant difference was found in the perception of overall tourism image characteristics between Chinese and foreign tourists. Both groups were equally impressed by the Buddhist culture of Mount Emei, the historical temples, and the "statue" of Pusheen Bodhisattva.

Mount Emei serves as a prominent tourism attraction due to its status as a world cultural and natural heritage site. The site's rich cultural and natural features captivate both Chinese and foreign tourists alike. Tourists have expressed their admiration for various cultural landmarks, including the "Wannian Temple," "golden top," "temples," "Leidongping," "statue," and "Baoguo Temple," attesting to Mount Emei's cultural significance. Additionally, tourists have been awestruck by the site's natural surroundings, with many expressing their admiration for the "sunrise", "view","park", "clouds", "monkeys," "foggy", "snow.", etc. These observations serve as a testament to Mount Emei's natural splendor.

The high-frequency words such as "bus", "car", "cable", "stop", "station" all indicate the transportation modes utilized primarily by tourists during their visit to Mount Emei. Mount Emei scenic spot offers convenient public transportation services to facilitate tourists' visits. Accommodation and catering services are also available to visitors, as evidenced by the use of the terms "hotel" and "local food". The expenses incurred by tourists are reflected in the terms "tickets" and "RMB". Notably, foreign

tourists tend to perceive the cost of visiting Mount Emei as relatively expensive, whereas Chinese tourists tend to view it as cost-effective. The implementation of services such as "multilingual signage," "bilingual guides," "foreign language consultation service systems," and "foreign language volunteers" has significantly reduced language barriers for foreigners while traveling in Leshan.

The present study investigates tourists' touring experience with a specific focus on Mount Emei. Analysing high-frequency words used by foreign tourists, it was observed that they maintained a generally positive evaluation of their tour experience on the mountain. The adjectives "great", "amazing", "nice", and "worthy" were all used to express their satisfaction with the unique natural and cultural landscape of Mount Emei. Despite this, however, hikers noted that the high altitude and complicated weather changes resulted in a perception of "cold" climate and a "hard" climbing experience.
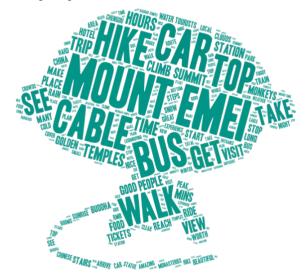

Figure 1: Word cloud map representing high-frequency terms of reviews by foreign tourists

4. Research conclusion

By conducting online text analysis, this study examines user-generated reviews about Mount Emei from official websites Ctrip and TripAdvisor. The analysis focuses on high-frequency words used in these reviews to gain insights into the cultural perceptions of Chinese and foreign tourists regarding Mount Emei. Four aspects are considered: the characteristics of overall tourism image, tourism attractions, tourism environment and service facilities, and the overall touring experience. It is found that both Chinese and foreign tourists maintain a high degree of recognition for the rich Buddhist culture, the magnificent natural scenery of Mount Emei, and language services. This indicates that the image of the World Cultural and Natural Heritage Site of Mount Emei is widely acknowledged by both Chinese and foreign tourists. Chinese tourists' comments mainly stem from their personal experiences and reflections, while foreign tourists tend to emphasize the natural and cultural landscapes of Mount Emei in their reviews. During their visit, both Chinese and foreign tourists have exhibited favorable and positive emotional attitudes towards Leshan. Multilingual services have played a significant role in overcoming language barriers and enhancing the internationalization of the city. In response to the changing circumstances, Leshan should seize the opportunity to integrate tourism resources and service facilities, establishing multilingual touring platforms, fostering innovation of foreign language volunteer service that cater to the diverse needs of an multilingual communication and interaction context. The goal is to construct a comprehensive and multidimensional model of multilingual services that involves active participation from various stakeholders. This includes improving public services and language self-service facilities, such as multilingual calling services and language assistance in public places within the technology. Local universities should also play an active role in providing public services.

This study is subject to certain limitations, as evidenced by the following issues. Firstly, the number of review texts from Chinese tourists is significantly higher than that of foreign tourists, making the sample size imbalanced and potentially affecting the analysis of cultural perception differences between the two groups. Secondly, discrepancies in expression habits between Chinese and English may lead to errors when extracting and classifying high-frequency words. The text content regarding foreign language services is not sufficiently diverse, which could potentially impact the accuracy of the analysis

results. Future studies should mitigate these limitations by collecting review texts from multiple sources and selecting texts from the same time period to facilitate a more comprehensive analysis of cultural perception differences between Chinese and foreign tourists in Mount Emei.

Acknowledgment

References

[1] Fodness D. Consumer perceptions of tourist attractions [J].Journal of Travel Research, 1990, 28(4); 3-9.

[2] Andriotis K. Sacred site experience: a phenomenological study [J]. Annals of Tourism Research, 2009, 36 (1): 64-84.

[3] Chen C F, Chen F S. Experience quality, perceived value, satisfaction and behavioral intentions for heritage tourists [J]. Tourism Management, 2010, 31 (1):29-35.

[4] Heng S, Sun C, Tan G. Cultural perception differences between Chinese and foreign tourists about world heritage sites based on text [J]. Journal of Huaqiao University (Philosophy & Social Sciences), 2022, (01):64-77.

[5] Mao B. A study on the influence of cultural perception and revisit intention of tourists in world cultural heritage sites-The case of West Lake in Hangzhou [J]. Commodity and Quality, 2012, (S8):207-208.

[6] Qiu W. Research on the influencing factors of cultural perceptions of tourists in World Dual Heritage tourism sites [D]. Jinan University, 2017.

[7] Yang B, Zhang J. A comparative study of chinese and foreign tourists' perceptions of tourism image of Hangzhou West Lake scenic spot before and after G20 Summit: in the case of chinese and foreign tourists comment, Bulletin of Science and Technology, 2019,35(03):226-233.

[8] Yang B, Zhang J. Research on tourism image and perception of Tianmu Mountain based on network text analysis: based on travel notes and comments of Ctrip [J]. Journal of Fujian Forestry Science and Technology, 2017, 44(04):118-125.

[9] He X, Xie J, Zhang Y. Study on tourism images of karst caves based on web text analysis: an example of the Zhijin cave in Guizhou Province [J]. Carsologica Sinica, 2019, 38(06):957-966.