Characteristics and Perception of Cultural Tourism Resources in Mt. Huangshan Scenic Spot

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Abstract. Taking Huangshan Mountain Scenic Spot as the research object, this paper explores the types, characteristics and perception of the cultural tourism resources of the double heritage scenic spot through collecting previous literature, on-site investigation and comparative analysis and other research methods. The results show that: (1) There are four types of cultural resources in Mt. Huangshan Scenic Spot, namely, cliff stone carving, historical structure, literary works and cultural spirit; (2) Compared with Tai Mountain, Emei Mountain, Wuyi Mountain and other world cultural and natural heritage sites tourists have low perception of cultural tourism resources in Huangshan Mountain Scenic Spot; (3) Factors such as typical natural attribute, single tourism product and seasonal tourists flow are the main influencing factors of low perception of cultural tourism resources in Huangshan Mountain Scenic Spot. Paying attention to resource mining, strengthening product design and expanding the scope of publicity, etc. can increase tourists' perception of cultural tourism resources in Huangshan Mountain Scenic Spot.

1. INTRODUCTION
The world cultural and natural heritage refers to the conservation body with world natural and cultural attributes and is the typical representative among various natural and cultural heritage. By 2020, there are only 39 world dual heritage sites among the 1121 world heritage sites. Among 55 heritage sites in China, there are only 4 dual heritage sites, including, Tai Mountain, Huangshan Mountain, Leshan Giant Buddha of Emei Mountain, Wuyi Mountain. In recent years, with the rise of mass travel, various world heritage sites have been the first destinations for tourists, especially those rare dual heritage sites. However, during their travel in the dual heritage sites, tourists still follow the manner of sightseeing natural landscape, but have an extreme perception of cultural heritage, equating double heritage with natural heritage.

As one of the dual heritage sites in China, Huangshan Scenic Spot has high appreciation value for its natural landscape, so that the value of cultural heritage has been weakened and ignored. It is not only reflected in tourists' ignorance of the cultural resources of Huangshan Scenic Spot, but also in the inadequate design of cultural tourism products, which is not conducive to the realization of the tourism value of Huangshan Scenic Spot to some extent. For this reason, this paper, from the perspective of tourism development, make research on the cultural tourism development of the dual heritage site—Huangshan Scenic Spot so as to provide a reference for the comprehensive development of tourism resource of dual heritage sites.
2. Overview of Research Area

2.1. Physical Geography
Huangshan Mountain Scenic Spot is located in the southern part of Anhui Province, covering Huangshan District, Shexian County, Xiuning County and Yixian County in the territory of Huangshan City, with an area of about 160.6 km² (see Fig. 1). The zonal climate type of the scenic spot is subtropical monsoon climate, with average annual temperature at 7.8°C. In summer, the annual maximum temperature is 27°C, and the average temperature 25°C; while in winter, the annual minimum temperature is -22°C, and the average temperature above 0°C. The annual precipitation is 2394.5 mm, with 180 rainy days. The flood season is generally in April to August, and the main flood season is in May to July.

![Fig. 1. Location of Huangshan Mountain Scenic Spot.](image)

2.2. Tourism Activities
Huangshan Mountain Scenic Spot was listed as the first batch of National Key Scenic Spots in 1984, included in the World Cultural and Natural Heritage by UNESCO in December 1990, selected as the Global Geoparks in February 2004, and assessed as the National 5A Tourist Attractions by the National Tourism Administration in 2007, and according to the assemblage of feature spots in it, Hot Spring, North Sea, Jade Screen, Fishing Bridge, Cloud Valley and Pine Valley and other secondary scenic spots were formed. Since the 1970s, tourism has developed rapidly, and the tourist volume of the area has increased year by year (see Fig. 2).

![Fig. 2. Tourist Arrivals of Huangshan Mountain Scenic Spot (1979-2018). Source: Anhui Annual Statistic Report](image)
3. Analysis of Resource characteristics and perception

3.1. Characteristics of Cultural tourism Resources in Huangshan Mountain Scenic Spot

Huangshan Mountain attracts countless eminent monks, refined scholars, writers and poets and celebrities with its magnificent scenery of grotesque peak and rocks and sea of clouds, as well as the enchanting charm, poetic and profound artistic conception, and leaves rich cultural heritage.

3.1.1. Inscriptions on precipices

Since the poet Li Bai inscribed "Ming Xian Quan" beside Zui stone in 745 A.D., from Tang dynasty to the Republic of China and contemporary age, there have been more than 300 inscriptions on precipices, including more than 40 inscriptions on tablets. They can be found in the literature of the past dynasties, but more than 30 inscriptions have disappeared over the years[1].

3.1.2. Historical buildings and structures

It is said that after Huangdi made pills and became an immortal, Huangshan becomes a holy place for Taoist to cultivate their body and nature and seek for Taoism and visit immortals. Some Taoist friends and eminent monks all came to Huangshan to meditate to find immortals and open up wasteland. After more than 1000 years of construction, there are countless ancient temples, pavilions, bridges, dangerous fortresses and passes, walkway platforms, etc (see Fig.3).

3.1.3. Literary Works

Some data show that from the prosperous Tang Dynasty to the late Qing Dynasty, there are hundreds of essays and more than twenty thousand poems about Huangshan. In addition, there are a lot of folklore and mythology. According to the statistics, a total of 278 poets can be found in the Huangshan Chronicle in the Qing dynasty, and 242 of them can be verified[2]. As early as the middle of the 16 century, there were pictures of Huangshan in the Ming dynasty.

3.1.4. Literary Spirits

(1) Spirits of Pinus Taiwanensis

Pinus taiwanensis, elegant and graceful and vigorous, is known as the first wonderful scenery of Huangshan. They grow on cliffs and stand on danger spots. Except strange images of various forms, they contain profound humanistic spirits. People summarized “the spirits of pinus taiwanensis” as “the spirit of self-improvement, perseverance, unity, openness and dedication as well as enterprising spirit”.

(2) Deng Xiaoping’s “Huangshan talking” spirit
In July 1979, Deng Xiaoping, the chief designer of reform and opening up in China, climbed the Huangshan on foot at the age of 75 and made a far-reaching Huangshan talk with broad strategic vision, advanced theoretical quality and great wisdom. It opened the curtain of tourism development of Huangshan, even China. Deng Xiaoping gave the important instructions about Huangshan’s tourism development on both tourism and economy, development and reform.

3.2. Tourists’ Perception of Cultural tourism Resources in Huangshan Mountain Scenic Spot

Tourism resource is the basis of tourism activities in the tourism area. The tourists’ perception of tourism resource in the scenic spots basically reflects the development status of the scenic spot. In big data era, with the development of the Internet and mobile communication technology, to make text mining analysis of the contents of online comment is the most direct and real way to obtain the tourists’ perception. Because of the important value, the dual heritage sites become the focus of research.

3.2.1. Research on Tai Mountain

Chen Ning taking 90 travel notes published in the Ctrip and mafengwo.com from January 2017-February 2018 as samples, using R OST Content Mining 6 software to carry out quantitative processing, and obtaining high-frequency words through word segmentation, custom dictionary, filtering dictionary and other steps. The top 60 words show that there are sunrise, Tianmen, Nantianmen, Zhongtianmen, hilltop and Yuhuangding involving natural tourism resources, and Tianjie, Daimiao, stone carvings, eighteen plates, stone steps, Fengshan and Hongmen involving human tourism resources[3]. It can be seen that the tourists’ perception of natural and cultural resources in the Mount Tai is balanced on the whole.

3.2.2. Research on Emei Mountain

Feng Xiaobing’s research on the tourists’ perception of Mount Emei shows that Mount Emei is famous for biological landscape (monkeys, forests, vegetation), astronomical phenomena and climate landscape (sunrise, sea of clouds, clouds and fog, snow), buildings and facilities (temples, Daoists, Buddha statues, golden halls), and human activities (Buddhism, Samantabhadra)[4]. It can be seen that tourists’ perception of Mount Emei tourism landscape is comprehensive, including natural landscape and cultural landscape, which is consistent with the “dual heritage” of Mount Emei.

3.2.3. Research on Wuyi Mountain

Ding Xin found that the natural landscape of Mount Wuyi is most prominent (4571 times, frequency of 39.62%), including, Mount Wuyi, Tianyou Peak, A Ray of Sky, Jiuqu Stream, Yunv Feng and other main scenic spots, fully reflecting the attraction of nature to tourists. Secondly, the cultural landscape (880 times, frequency of 7.63%) mainly includes Wuyi Palace, Buddha Hall, Song-dynasty-style street and so on. In addition, folk customs (325 times, 2.82%) includes impression of Dahongpao, inscriptions on precipices, tea, tea tree, mother tree, tea garden, tea tasting, etc. Historical culture (348 times, frequency of 3.02%)[5].

3.2.4. Research on Huangshan Mountain

Xu Yayuan used the content mining software ROSTCM6.0 to analyze the tourists’ comment text and found that tourists had more perception of the natural scenery of Huangshan. However, they lacked obvious perception of the tea culture, Huangshan painting school, catering culture, inscriptions on precipices and other image elements in Huangshan[6].

Huang Shengnan made a more detailed research. There are 94 attractions for tourists in the Huangshan Mountain Scenic Spot, corresponding to the frequency of 2097. Tourists’ footprints are successively concentrated in Xihai Grand Canyon, Yuping scenic spot, Guangmingding, Beihai and Xihai, while there are only 6 times of visit of the historical cultural remains, including, “celebrities”, “stone carvings”, “dream of Red Mansions”, “Libai”, “allusions”, less than 1%[7].
3.2.5. Comparative Conclusion

In a word, it can be found that in the four “dual heritage” scenic spots, tourists’ perception of natural landscape is higher that that of cultural landscape, which is consistent with the conclusion made by Liu Juan on the tourists’ perception of tourism value in 6 heritage sites: tourists’ tourism perception of world natural and cultural dual heritage sites focuses on natural attributes, and tourists have a larger proportion of perception of natural attributes than that of cultural attributes, while the perception of Huangshan basically stays on its natural attributes. The cultural value of Huangshan isn’t reflected [8] (see Fig.4). In a word, though there is rich cultural resource in Huangshan, tourists don’t perceive it.

![Fig. 4. Tourists’ Perception of World Cultural and Natural Héritag Scenic Area](image)

4. The Influence of Lack of perception

There is a common problem of lack of development of cultural tourism resource for the mountain scenic spots. The tourism activity status of Huangshan Scenic Spot is mainly the visual view, namely, a hurried landscape tour in a single level. Most of tourists fail to really feel the overall value and significance of Huangshan as the world cultural and natural heritage, which causes some bad influence.

4.1. Great pressure on natural ecology

Tourism activities will have influence on the environment inevitably, especially on the tourism environment of heritage sites. They are precious and unique scarce resources. It is hard to recover once destroyed. Researches show that tourism activities have negative influence on the water environment, plant soil property, animal, solid waste and other natural environment of Huangshan Scenic Spot[9]. Tourism disturbance made the height of shrub coverage tend to rise, the height of herbaceous layer decrease significantly, the species composition of herbaceous layer affected significantly, and the thickness of litter layer decrease significantly[10]. The content of soil moisture, organic matter, total nitrogen and total phosphorus decreased, and the soil bulk density, pH value and total potassium increased (see Table 1). The higher degree of visiting the area, the stronger relevance between the influence effect and tourism interference, and the greater the influence effect[11]. Though Huangshan Scenic Spot implements the rotation of Tiandu Peak, Lianghua Peak and so on, most of scenic spots still receive tourists over the years. Thus, to enlarge tourists’ activity area and divert tourists can relieve the ecological pressure in these places.

| Index          | 0~10cm | 10~20cm | Average |
|----------------|--------|---------|---------|
| Water content  | 0.954  | 0.863   | 0.909   |
| soil moisture  | 0.955  | 0.906   | 0.931   |
| pH Value       | 0.894  | 0.795   | 0.845   |
| Organic matter | 0.903  | 0.867   | 0.885   |
4.2. Single tourism product
From the perspective of tourism development trend, the proportion of traditional tourists who tend to sightseeing is declining, while the proportion of tourists who pursue cultural enjoyment, pay attention to tourism experience and participation is increasing. However, Huangshan Tourism is still a sightseeing product, lacking of higher-level participation, experience, vacation and special tourism products here. Compared with cultural tourism products, the stay time of tourists is relatively short, which weakens the unique advantages and competitiveness of Huangshan. Huangshan is the most influential scenic spot in China, and it ranked first among the four major dual-heritage scenic spots, but tourist reception and ticket revenue fell behind (see Table 2).

### Table 2. Tourism development of World Cultural and Natural Heritage Scenic Spot

| Scenic Spot      | Number of visitors (Ten thousand) | Tourism revenues (Billion RMB) | Influence ranking of national 5A tourist attractions in 2018 (TOP50) |
|------------------|-----------------------------------|--------------------------------|-------------------------------------------------------------|
| Tai Mountain     | 562.1                             | 4.1                            | 34                                                          |
| Emei Mountain    | 329.5                             | 4.7                            | 17                                                          |
| Wuyi Mountain    | 388.02                            | 3.5                            | -                                                           |
| Huangshan Mountain | 338                             | 3.9                            | 7                                                           |

4.3. Obvious tourism congestion
“Tidal tourism congestion” has become a unique geographical phenomenon in China, which has caused many problems, and has a serious negative impact on tourist satisfaction, scenic image and tourism safety[16]. The core scenic area of Huangshan scenic spot is about 160.6k m², and the maximum daily capacity is 50,000 people, so there will be no overall crowding. But relevant studies show that many tourists complain that "The shortcoming is too many people here." "Too many people" and "wait in line" aroused negative emotions of tourists, [9] which has became one of the main negative factors affecting the image of Huangshan. At present, the congestion occurs in the popular scenic spots such as Beihai, Xihai, Yuping, etc., which are also the areas with the best natural scenery, while the Songgu and Baiyun scenic spots with relatively rich cultural resources are not crowded (see Table 3). Therefore, these areas can be vigorously developed to attract tourists and become the "flood discharge area" during the crowded period[13].

### Table 3. Results of Crowded degree around Huangshan Mountain

| Place              | Physical crowding       | Psychological crowding | Index |
|--------------------|-------------------------|------------------------|-------|
|                    | Area [100 m²]          | Number [person]        | Density [person/100 m²] | Index |
| Chi Guang Ge       | 11.75                   | 411                    | 34.97 | 1.975089 |
| Yuping Pavilion    | 9.5                     | 908                    | 95.57 | 2.345196 |
| Tian Hai           | 7.2                     | 207                    | 28.75 | 2.402135 |
| Brightness top     | 19.5                    | 1410                   | 72.3  | 4.514235 |
4.4. Obvious seasonal tourism

The seasonal variation of tourist flow in Huangshan is obviously restricted by the natural seasonal factors and the rules of residents’ travel. There is a large seasonal difference, and the seasonal concentration index of tourism has maintained a high level[13], so tourist flow season has always been characterized by “three peaks and three valleys”. Although the government has taken some measures, such as increasing the promotion of winter tourism and launching the tourism product “winter and snow in Huangshan”, the effect is not obvious.

Cultural scenic spots are less affected by natural seasonal factors, so the seasonal difference of tourism is smaller. Although Jiuhua Mountain and Huangshan Mountain are both affected by natural seasonal factors, they are not the same seasonally. Jiuhua Mountain is not very suitable for tourism in natural conditions. But buddhist festivals can attract more tourists, thus reducing the seasonal difference. The study on the seasonal differences of tourism in four mountain scenic spots in Jiangxi Province also shows that in autumn and winter, the off-season of Lushan Mountain and Jinggangshan Mountain, the traditional mountain scenic spots, comes earlier than than Longhu Mountain and Sanqing Mountain, the mountain scenic spots with prominent religious culture[14]. Therefore, the exploitation of cultural tourism resources in Huangshan scenic spot is beneficial to reduce the influence of seasonal passenger flow in Huangshan Scenic Area.

4.5. Different tourist satisfaction

Tourist satisfaction is a comprehensive psychological evaluation of tourist attractions, which directly affects the loyalty of tourists, the rate of tourists' revisiting, and the willingness of tourists to recommend and actively publicize to their relatives and friends. It is also the most important factor affecting the development of tourist attractions. The survey found that the overall satisfaction index of Huangshan is 82.34, which is highly evaluated, but there is still a certain gap with the world heritage level[15]. The reason for the gap is the value of scenic spots. Although 81.6% of the tourists feel "satisfied" and "very satisfied" with the tour value of Huangshan, the average value of the tour value of Huangshan is only 79.4 in general, which shows that some tourists are not very satisfied and think there is an imbalance between quality and price[15]. Where do the imbalance and dissatisfaction come from? On the one hand, tourists feel the social service environment is poor. There are many key factors, including substandard behaviors and phenomenon in management: street vendors sell goods everywhere; the service attitude of staff from service industry is poor; overcrowded tour conditions makes tourists feel uncomfortable; and the explanation from tour guides is inadequate[15] (see Table 4).

On the other hand, the unique natural landscape of Huangshan has been recognized by the world, but many tourists can’t feel or understand the cultural value through their visit. In the service management opinions of tourists, some tourists proposed that relevant department should continue to develop more cultural connotation and strengthen cultural management of Huangshan.

Table 4. Analysis on frequency and mean of tourist satisfaction in Huangshan Mountain

| Variable factor | 1 (%) | 2 (%) | 3 (%) | 4 (%) | 5 (%) | mean value (mark) |
|-----------------|-------|-------|-------|-------|-------|-------------------|
| Visit value     | 0.8   | 6.4   | 11.2  | 58.4  | 23.2  | 79.4              |
Environmental perception | 0.8 | 8 | 18.4 | 58.4 | 14.4 | 75.6 |
| Natural landscape | 1.6 | 2.4 | 11.2 | 68 | 16.8 | 79.2 |
| Social services | 2.4 | 24.8 | 20 | 44.8 | 8 | 66.2 |
| Tourist expectation | 4 | 32.8 | 16 | 38.4 | 8.8 | 63 |
| Natural landscape expectation | 1.6 | 4.8 | 9.6 | 48.8 | 35.2 | 82.2 |
| Service expectation | 4 | 7.2 | 17.6 | 48 | 23.2 | 75.8 |

Notes: “1, 2, 3, 4 and 5” respectively mean “very dissatisfied”, “dissatisfied”, “indifferent”, “satisfied” and “very satisfied”

5. Discussion

Huangshan Mountain Scenic Spot is rich in cultural resources, but few tourists know about them, which indicates that the tourism development of Huangshan cultural resources is still in the primary state. Therefore, it should be taken seriously, the relevant departments should excavate connotation, design products, expand publicity and personnel training, so as to realize the cultural value return of world heritage, so as to obtain lasting competitiveness.

5.1. Attaching more importance to the protection and development of cultural heritage

Cultural heritage is of cultural symbolic significance. It is the charm and characteristics of scenic spots to endow scenic spots with soul and nourishment. But the managers of Huangshan scenic spot did not realize it. The heritage management of Huangshan scenic spot is seriously biased. It has always attached great importance to the natural heritage, failed to realize the importance of cultural heritage. The related work of cultural heritage has been less carried out, which makes the cultural heritage resources have not been well protected, and the display and interpretation work has not been carried out. In order to achieve the goal of sustainable, healthy and stable development of scenic spot tourism, relevant managers should change their understanding, adjust their position, reposition Huangshan scenic spot, and insist on the protection and display of cultural and natural heritage. Only in this way can the comprehensive development of scenic spot be promoted.

5.2. Strengthening the excavation and display of cultural resources

The cultural heritage of Huangshan is abundant, but the present excavation and display are extremely limited, which need to be divided into different categories. If the disappeared ancient buildings, such as temple and pavilion, can be restored, the relevant departments should consider when and where to restore according to the actual situation, and if there is no need to restore, please do a good job in the protection of ruins and relics; For the existing and immovable cultural heritage scattered in the scenic spot, such as pavilions, tower, workshop and bridge, relevant departments should set up a detailed explanation board with full Chinese and English commentary, and every spot should be clearly marked on the guide map to remind tourists to watch; The movable cultural relics collected in the storehouse, such as paintings, sculptures, poems and works, can be specially displayed in museums.

5.3. Designing cultural tourism products

At present, the tour route of Huangshan scenic spot is basically fixed. The result is that, on the one hand, there will be the tourists jam in some popular scenic spots at a certain time; and on the other hand, the cultural heritage sites visited by tourists are very limited. Therefore, it is necessary to design more tour routes, especially to connect as many cultural resources as possible to tour routes, so that tourists can choose according to their own preferences. It not only enriches the tourism products of Huangshan and the tourists’ experience, increases the cultural connotation of Huangshan, but also expands the influence of Huangshan cultural heritage, and realizes the educational function of cultural
heritage. It also helps to realize the tourist diversion, expand the tourist capacity of the scenic spot, relieve the over-concentration of tourists, relieve the ecological pressure of the scenic spot, and extend the life cycle of the scenic spot.

5.4. Expanding external publicity and promotion
Before coming to Huangshan Scenic Spot, tourists are lack of perception of Huangshan cultural tourism resources, so it is necessary to strengthen the development and expand the publicity of Huangshan Scenic Spot, so that tourists will have a deep impression on Huangshan culture in the information search before coming to Huangshan, which can help them to find and experience through traveling. Therefore, cultural propaganda should be increased in the “Huangshan” brand publicity and product promotion by the government, and cultural factors should be injected into the operation of tourism enterprises, such as the printing of tourism guidebooks and brochures, and the packaging of tourism products. At the same time, it is necessary to broaden channels, strengthen publicity and promotion, and improve tourists’ recognition and familiarity with the cultural heritage and deposits of the scenic spot.

5.5. Training staff on culture knowledge
On the one hand, the Huangshan Management Committee should publicize the culture of Huangshan Mountain to the outside world, which will enhance the attraction of Huangshan scenic spot to tourists, and on the other hand, the Huangshan Management Committee should devote more effort to train employees who are the communicators and practitioners of Huangshan culture. The current situation is not optimistic, because the tour guides of the scenic spot lack understanding of the culture of the scenic spot, and their interpretation is mainly about natural scenery, which includes few material and non-material heritages, except for some notable cliff carvings. Therefore, all staff of Huangshan scenic spot, including hotel attendants and tour guides, should receive systematic training and guidance of Huangshan cultural knowledge to improve cultural literacy, so that tourists can understand Huangshan more completely and fall in love with it.

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