

The Construction of Evaluation System of Rural Tourism Development of Intangible Cultural Heritage From the Perspective of Tourism Landscape Taking the Intangible Cultural Heritage of Doumen District, Zhuhai City as an Example

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ABSTRACT

Based on the related theories of tourism landscape and AVC theory (the core of "Trialism of Landscape" proposed by Liu Binyi, including the attraction, vitality and carrying capacity of tourist destinations), this paper attempts to analyze the tourism characteristics of intangible cultural heritage. Taking the intangible cultural heritage in Doumen District of Zhuhai City as an example, this paper evaluates the value of rural tourism development, and classifies the intangible cultural heritage according to the research results. And then, the befitting tourism development is carried out according to different types of intangible cultural heritage.

Keywords: tourism landscape, intangible cultural heritage, rural tourism development, value evaluation system

I. INTRODUCTION

The word "landscape" is widely used in natural science. However, in different disciplines and different research fields, people have different understandings and interpretations of landscape. "Landscape in a broad sense is macro, comprehensive and regional, and landscape can fully reflect the combination characteristics and anthropogenic influence of various physical and geographical elements in this area." [1]

Tourism landscape generally refers to objective entities with certain scenery, sights and morphological structures, such as views, buildings, and entertainment venues for enjoyment, and cultural and spiritual phenomena that tourists can feel and experience, as well as the beautiful environmental conditions existing in the region and tourism reception services, etc. (Li Hui, 2005) It also refers to a dominant unique landscape type (namely, natural landscape, or human landscape,

or both natural and human landscape) in a certain geographical area. The tourism resource objects include a certain economic level of the region and the service and reception facilities. Relying on one or several central cities, a regional, natural, social, economic, and cultural complex will be built that can provide tourists with tourism activities (Fang Haichuan, 2002). Tourism landscapes are attractive to tourists and can encourage tourists to carry out tourism activities and produce pleasant experiences (Dan Qiang and Zhu Zhu, 2005). Tourism landscapes can be divided into natural tourism landscapes, cultural tourism landscapes and complex tourism landscapes [2]. Intangible cultural heritage belongs to a kind of cultural tourism landscape.

At the beginning of the 21st century, Liu Binyi of Tongji University put forward the "Trialism of Landscape". The core of "Trialism of Landscape" is "AVC theory", including the attraction, vitality and carrying capacity of tourist destinations. The sustainable development of tourism is possible only when these three factors are in consideration. This is a set of theories on tourist attraction design and planning, and its application role is to increase the sustainability of development. Attraction can be understood as that heritage destinations are like magnets and magnetic fields, while visitors who visit heritage sites are fragmentary magnetic objects. The charm of the

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heritage site gives it a recognizable brand image and response. The ability to identify the market and satisfy the tourists' needs is the basis for a tourist destination to survive.

Vitality refers to the ability of a tourist destination to develop and survive smoothly in three aspects of economy, society and environment, and at the same time, vitality can also make its development to a higher level. Inside the tourism system, there is the interaction relationship between the tourism and environment. The purpose of exploring the vitality of tourism system is to ensure the accuracy of operation management and development strategy of tourism project products, so that the scenic spot can develop for a long time. Carrying capacity refers to the scale of economic input and output, the carrying capacity of tourist residents and cultural heritage sites and the carrying capacity of ecological environment. It is used to solve the contradiction between resource protection and tourism development (Liu Binyi, 2003).

Therefore, it is not entirely applicable to use the criteria of intangible cultural heritage indicators in the evaluation of intangible cultural heritage tourism resources. Therefore, scholars and cultural policy constitutors pay attention to and explore the relationship between development and protection. In the past, people only dare to talk about the protection of intangible cultural heritage, but dare not talk about the development of it. However, the development of modern cultural tourism has proved that practice has gone ahead of the theory. The protection of intangible cultural heritage in China is led by the government, and the cultural awareness of the masses is not enough. Tourism developers and operators also lack the theoretical knowledge and systematic guidance of cultural heritage development, which makes the development of intangible cultural heritage profitable and superficial, even template and common. Therefore, in order to improve the effective development and protection of intangible cultural heritage, it is necessary to evaluate the attractiveness, vitality and carrying capacity of intangible cultural heritage from the perspective of tourism development.

II. THE METHODS OF STUDYING INTANGIBLE CULTURAL HERITAGE AND RURAL TOURISM DEVELOPMENT AND THE ESTABLISHMENT OF EVALUATION SYSTEM

Professor Liu Binyi's AVC theory is a subject synthesis which depends on the planning of resource utilization, tourism development and the development strategy of scenic spots. AVC analysis of heritage sites or intangible cultural heritage can make heritage tourism sites have brand influence and the ability to attract tourists. Attractiveness, vitality and carrying

capacity are organically linked as a whole and are a complex of multiple elements (Zhang Wenhui, 2008). Based on this theory, this paper establishes the value evaluation system of tourism development of intangible cultural heritage, and uses qualitative and quantitative evaluation methods to make the conclusion more scientific, convincing and practical.

In the specific research, this paper mainly uses two qualitative and quantitative methods of analytic hierarchy process and Delphi method to comprehensively evaluate the development value of tourism resources related to intangible cultural heritage from the perspective of development and utilization. Analytic hierarchy process, also known as decomposition hierarchical process, is a systematic analysis method invented by T. L. Saaty of the United States. People decompose the things related to decision-making, and make the qualitative and quantitative analysis, which is generally used to solve the evaluation problems of the complicated evaluation system with hierarchical structure or network structure. Delphi method is also known as expert inquiry method. It is used under the condition of lacking historical data or trend data, or under the condition that there is a high-standard subjective judgment on the existing model. Generally, it is a method of summarizing the questionnaires to experts and drawing conclusions.

According to the results of literature research and the actual situation of Doumen intangible cultural heritage, the evaluation index of tourism development value of intangible cultural heritage in Doumen District is constructed. (as shown in "Table I")

TABLE I. EVALUATION OF THE TOURISM DEVELOPMENT VALUE OF INTANGIBLE CULTURAL HERITAGE IN DOUMEN DISTRICT

Ideal evaluation index of tourism development value of intangible cultural heritage				
A destination layer	B Project evaluation layer	C element evaluation layer	D Factor evaluation layer	
Intangible heritage Product evaluation	B1 Attractiveness of heritage	C1 Heritage resource quality	D1 Level of heritage	
			D2 Heritage popularity	
			D3 Heritage abundance	
		C2 The uniqueness of heritage site	D4 scarcity and singularity	
			D5 Suitable duration and range	
			C3 environmental conditions of heritage site	D6 Environmental comfort and safety
				D7 whether environment has the protection role
		C4 utilization value of heritage		D8 the breadth and depth of tourism development
			D9 the ability to shape and provide experience	
			D10 whether there is a famous scenic spot relying on	
	B2 vitality of heritage	C5 tourism sector's capacity to manage heritage	D11 technology and personnel	
			D12 financing capacity	
			C6 tourism development conditions	D13 Heritage site conditions
		D14 Brand positioning of heritage site		
		D15 The contribution of heritage tourism development to regional economy		
		C7 stakeholders' awareness of heritage protection	D16 Tourism conditions of Heritage site	
			D17 Infrastructure conditions of heritage site	
			D18 Government	D19 Local residents
				D20 tourists
		D21 operator		
	B3 carrying capacity of Heritage	C8 current inheritance status	D22 Popularity	
			D23 Status of Inheritors	
			D24 The research status has a negative impact	
		C9 Possible negative effects of heritage productization	D25 heritage	
			D26 local social lifestyle and cultural traditions of heritage site	

Relying on the above-mentioned evaluation system of tourism development value of intangible cultural heritage resources, the evaluation questionnaire is issued to experts and scholars in the field of heritage protection and tourism development. After collection and verification, the importance of each factor is considered, and the procedures such as single hierarchical ranking and total hierarchical ranking are carried out. Delphi method is used. 20 relevant experts, scholars, travel agency staff and students filled out questionnaires on 26 indicators of 20 intangible cultural heritage projects in Doumen District, and obtained their scores by means of grading. The mathematical model of

Rosenberg Fishbein is used to calculate the evaluation results.

$$E = \sum Q_i P_i$$

In the formula, E represents the comprehensive evaluation score of tourism resources; Qi is the weight value of the ith evaluation element; pi is the evaluation grade value of the ith evaluation element; n is the number of evaluation elements. According to the evaluation level of tourism resources, the evaluation of Doumen intangible cultural heritage resources is divided into four levels. $E \geq 85$ is excellent; $75 \leq E < 80$

is good; $55 \leq E < 70$ is general; $E < 50$ is poor. Next, it is to assign values to the 20 intangible cultural heritages of Doumen District, and the final comprehensive evaluation score of each intangible cultural heritage can be obtained. According to the comprehensive scores of 20 items of intangible cultural heritage, the intangible cultural heritage with different comprehensive value scores can be classified, so as to carry out rural tourism planning for Doumen intangible cultural heritage resources. The 20 items of intangible cultural heritage

in Doumen District are scored one by one, and the total quantitative value of the 20 intangible cultural heritage can be obtained. This article uses the Richter scaling method and the fuzzy scoring method. In order to facilitate the statistics of the final quantitative value, the experts' rating 1-9 is converted into the following value table. If the expert's score is 10 points, then the index coefficient of this item is recorded as 1.0; if the expert's score is 2 points, the index coefficient of this item is recorded as 0.2. (as shown in "Table II")

TABLE II. NORM TABLE OF EXPERTS' EVALUATION SCORES

The characteristic degree corresponding to the index of project resources	excellent	good	benign	general	poor	nothing
Coefficient	1	0.8	0.6	0.4	0.2	0

According to the 20 experts' scoring questionnaires, the scores of 26 indexes corresponding to 20 items of intangible cultural heritages are converted into coefficients. Finally, the scores of each index corresponding to 20 items of intangible cultural heritages can be obtained by multiplying the expert scoring coefficient of each index by its corresponding index weight W . Then, the total quantitative evaluation score of 20 items of intangible cultural heritages can be obtained by adding up the scores of all the indexes. According to the score, the final comprehensive results are obtained.

Doumen marriage on the water, Shatin folk songs, Lianzhou Tylorrhynchus are "excellent" heritages; dancing lion, Cantonese song, fishing mudfish, Hakka folk song, Dachikan barbecued spareribs, Lianzhou dragon dance, putting joss sticks aside the road on July 30, Qianwu Piaoase, Doumen sacrificial rites of imperial family, Zhao, Lianzhou Dise, Buddhist boxing, Shangheng Huangshaxian and Hengshan Yazhabao are "good" heritages; Doumen Luogugui, Zhucaicha on the eve of the first day of the lunar year, salty tea of Hakka, and Jinchao pipa duck of Hushan are "good" heritages. On this basis, there is a quantitative reference to analyze whether to make large-scale development or protection of heritages.

The recession category The results showed that the evaluation scores of the Zhucaicha on the eve of the first day of lunar year, Hakka salted tea and Hushan Jinchao Pipa duck were between 50 points and 70 points. Because of the environmental migration, the rapid development of modern high-tech and the lack of successors, these five items of intangible cultural heritages are gradually declining in the market. However, these projects have their own economic and cultural values. Therefore, it is necessary to strengthen the training of successors, improve the environment, and carry out technological innovation, so as to increase their presence rate in the market.

The industrial development category The evaluation scores of Doumen marriage on the water, Doumen Shatin folk song, Cantonese song, dancing lion, fishing mudfish, Hakka folk song, dachikan barbecued spareribs, Hengshan Zhayabao, Doumen luogugui, Lianzhou dragon dance, putting joss sticks aside the road on July 30, Qianwu piaoshe, Doumen sacrificial rites of Zhao imperial family, Lianzhou Dise, Buddhist boxing, Shangheng Huangshaxian and Lianzhou Tylorrhynchus are greater than 70 points. These items are key development projects of Doumen intangible cultural heritages in rural tourism, which can be developed creatively on the basis of its protection and development. From the score analysis, the constraints of Doumen tourism development are the infrastructure of tourism development and the management ability of tourism department. □

III. THE CONSTRUCTION AND PLANNING OF DOUMEN INTANGIBLE CULTURAL HERITAGE SCENES

According to the quantitative analysis results, combining with the natural geographical location of Doumen District and the distribution of intangible cultural heritages, the scene construction and planning of intangible cultural heritages in Doumen District are carried out. (as shown in "Table III")

TABLE III. TOURISM CLASSIFICATION OF INTANGIBLE CULTURAL HERITAGES IN DOUMEN DISTRICT, ZHUHAI CITY

Item classification	Serial Number	Name	Level	Distribution Areas
Folk activities	1	Doumen marriage on the water	National level	being distributed in all towns of Doumen District
	2	Shatian folk songs in Doumen District	Provincial level	Baijiao Town
	3	fishing mudfish	National level	Qianwu Town
	4	Piaose at Qianwu Town	Provincial level	Qianwu Town
	5	dragon dance at Lianzhou Town	Municipal level	Lianzhou Town
	6	Dancing Lion	Municipal level	being distributed in all towns of Doumen District
	7	luogugui at Doumen District (a kind of musical instruments)	Municipal level	being distributed in Qianwu Town, Doumen Town, Jingan Town, Baijiao Town
	8	Dise at Lianzhou Town	Municipal level	Lianzhou Town
	9	putting joss sticks aside the road on July 30	Provincial level	being distributed in all towns of Doumen Town, and it is mostly performed in Hengshan, Lianzhou Town
	10	Doumen sacrificial rites of imperial family, Zhao	Municipal level	Doumen Town
Live performance on the stage	1	Cantonese songs	National level	Qianwu Town
	2	folk songs of the Hakkas	Provincial level	Baijiao Town
	3	Buddhism boxing	Municipal level	Qianwu Town
Tourists' experience of food	1	Hakka salty tea	Municipal level	Baijiao Town
	2	Zhucaicha on the eve of the first day of the lunar year	District-level	being distributed in all towns of Doumen District
	3	Hushan Jinchao pipa duck	Municipal level	Qianwu Town
	4	Dachikan barbecued sparerib	Municipal level	Doumen Town
	5	Shangheng Huangshaxian	Municipal level	Lianzhou Town
	6	Hengshan Yazhabao	Provincial level	Lianzhou Town
	7	Lianzhou Tylorrhynchus	Municipal level	Lianzhou Town

A. Folk activities

According to the quantitative analysis results, Doumen marriage on the water and Shatin folk songs belong to excellent heritages. And it is necessary to put the key development on these items. Doumen marriage on the water is complex and diverse in the form. It pays attention to etiquette and has a relatively fixed procedure and conventional etiquette items. Etiquette mainly includes "sitting in the hall", "heading up", "sighing", "escorting the bride to the wedding", "returning to the bride's home" and so on. It cannot be separated from the water environment and has obvious "water" characteristics, such as "meeting the bride at the flower boat", "worshiping Taigong and Dragon King". It has an inseparable relationship with Shatin folk songs. Therefore, the two can be combined to develop characteristic folk culture festival. It is the

unique customs of Doumen District and has the significance of cultural identity. At the same time, it is also the spiritual link to maintain the hometown feelings of overseas Chinese and Hong Kong and Macao compatriots. Many overseas Chinese imitate this ceremony. They are not only influenced by traditional folk culture, but also have the fun of family relationship. Therefore, it is necessary to be developed as the main body.

Dancing lion, fishing mudfish, Lianzhou dragon dance, putting joss stickets aside the road on July 30, Qianwu Piaoshe, Doumen sacrificial rites of Zhao imperial family, and Lianzhou Dise are "good" heritages, which should be properly developed. It can be developed as regional folk culture, but it needs to be combined with other categories, such as food experience. Doumen Luogugui belongs to the "general"

heritage. The reason is that there is a relative lack of successors and it is in the recession state in the market. Therefore, it is necessary to strengthen the cultivation of successors and increase their emergence rate in the market.

B. Live performance on the stage

According to the results of quantitative analysis, Hakka folk songs, Buddhist boxing and Cantonese songs belong to "good" heritages, which should be properly developed. For example, Hakka folk songs have a long history. People aged forties can usually sing a few songs. The form of performance is also flexible. It includes solo, rap, group singing, which are accompanied by folk music. The effect is very good. It is suitable for stage performance. The words are pure and fresh, easy to understand, witty pun and vivid. In festival activities, it can be performed as a link, so as to activate the atmosphere.

C. Food experience

In the food experience category, the results of quantitative analysis showed that Lianzhou Tylorrhynchus belonged to "excellent" heritage. In June 2018, Doumen District successfully applied for the title of "China's home of Tylorrhynchus", and was officially awarded the plaque of "China's home of Tylorrhynchus". Doumen has Zhuhai national agricultural science and technology park. Relying on the excellent ecological environment corresponding to the growth conditions of Tylorrhynchus, it is suggested to build it into the whole chain of Tylorrhynchus industry in Doumen District, promote the green development of Tylorrhynchus industry, construct farmhouse entertainment, or combine with other rural tourist attractions in the region to gradually build the tourism pattern of Doumen characteristic intangible cultural heritage.

The three items of intangible cultural heritages, such as Dachikan barbecued spareribs, Shangheng Huangshaxian and Hengshan Zhayabao are "good" heritages and can be properly developed. It can be combined with festival activities as food attractions to attract tourists; it can also make use of the seasonality of food and cooperate with other distinctive intangible cultural heritage in the region to jointly create festival activities. Zhucaicha on the eve of the lunar new year, the Hakka salted tea, and Hushan Jinchao Pipa duck belong to the "general" heritages. It is necessary to find the breakthrough point and the reasons of the decline, cultivate inheritors, optimize the environment and increase the emergence rate.

IV. CONCLUSION

Intangible cultural heritage takes material entity, human and cultural environment as the main carrier,

folk festival activities, live stage performance, and food experience are the feasible ways to develop the tourism related to Doumen intangible cultural heritage. It is suggested to take the location as the planning and the intangible cultural heritage as the leading to create scenery in every village, so as to make a cultural atmosphere of intangible cultural heritage. It is necessary to use the intangible cultural heritage to drive the development of rural tourism and open up new opportunities for the development of rural tourism.

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