Tourism Distribution of Xining city Tourism Circle

Evolution and spatial characteristics

Li Sheng-mei[1,2]   Shi Pei-ji[1]

[1]College of Geography and Environmental Science, Northwest Normal University, Lanzhou, China 730070

[2]Life and geography science institute, Qinghai Normal University, Xining, China 810008

[a]lishengmei888@gmail.com

[b]shipj@nwnu.edu.cn

Key words: Xining city tourism circle; tourism scale; tourism space characteristics

Abstract: This paper analyzes the change of tourism scale and the spatial characteristics of Xining city tourism circle by using tourism index, tourism first degree and tourism Gini coefficient. This paper discusses the development of Xining city Tourism and Xining city tourism circle. Xining city is the first city in tourism, but the first degree is decreasing. The number of tourists and the tourism economy are scattered in the tourism circle, but the tourism economy is scattered. The tourism economy is scattered in the tourism circle. In addition, the growth of the tourism circle presents the characteristics of single point agglomeration, axial directivity, regional difference and structural divergence.

Domestic research on tourism circles originated from the research of the international tourism culture circle in the South China Sea in 1994.Since 1996, research on tourism circles has become a hot topic in the study of tourism space structure [1-3].At present, the above situation is dwarfed by the Xining city, the overall understanding of development of the tourism industry is not high enough, the lack of overall tourism industry system, single product characteristics, no complete transportation network, the development potential and target positioning also there exists a certain gap.For this situation, this paper introduce tourism economy connection degree, first analysis methods and Gini coefficientsuch as quantitative analysis method to explore on the above travel size distribution changes and space problemsin Xining city.

research area definition

The great Xining city tourism circle is a tourism function circle formed by the center of Xining city, combined with surrounding cities and scenic spots, with a 3-hour drive to the radius.From the point of space structure and the tourist route, can be divided into three recreation areas from inside to outside, and the eight square bitmap extend in each direction (figure 1), respectively is: the three spheres of short-range recreation areas: from necessary, Huzhu county, Ping'an county is about 25 to 35 kilometers. Suburban recreational area is the radius of about 100 kilometers, about 1-1.5 hours' drive, includingGuide county andHuangyuan county. Exurban recreation area: the radius of about 250 kilometers, 2-2.5 hours' drive, including Haiyan county, Qilian county, and Gonghe

county. Spatial structure is the surrounding counties circle area, administrative area contains Datong county and Huangzhong county ofXining city,Huzhu county and Ping'an countyfromHaidong city, Menyuan county and Haiyan county from the Haibeiprefecture,Guide county from Hainanprefecture.According to the extension direction of the tour route, it can be divided into the east, west, south, north and northeast, northwest, southeast and southwest.
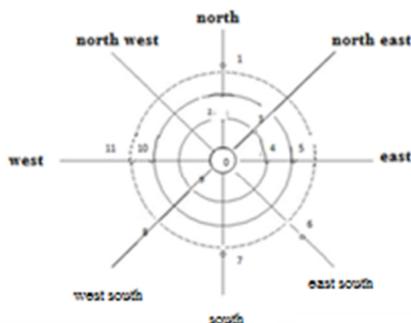
serial number	Place names	serial number	Place names
0	Xining	7	Guide
1	Menyuan	8	Huangzhong
2	Datong	9	Gonghe
3	Huzhu	10	Huangyuan
4	Ping'an	11	Haiyan
5	Ledu	12	Qilian
6	Jianzha		

Figure 1. The spatial structure and extension direction of the Greater Xining city tourism circle

Xining city tourism resources are rich, all kinds of resources are in the forefront of the country.There are 61 scenic spots that have been rated 3A.They include historical sites, water landscape, landscape of landscape, landscape of climate, tourism, modern human activities and other types (table 1).Among them, there are rich cultural tourism resources such as tea card, atomic city, tarsi temple,Qutan temple, etc.Tourist resources of natural number, there is no lack of high-quality goods, such as chase kite ditch national forest-park, mutual aid Beishan science, landscape, such as research and the characteristics of the aesthetic value of tourism resources.Therefore, it is possible to develop many kinds of tourism products with high quality, especially the eco-tourism and plateau characteristic tourism which is dominated by natural environment protection.

Table 1 .Basic types and proportions of tourism resources in Qinghai Province

Landscape indexes	National basic type (class)	Basic types of Qinghai (class)	Qinghai occupies the national proportion (%)
Historical sites	21	19	90.5
waters of the landscape	7	5	71.4
physiographic landscape	16	12	70
Climatic biological landscape	13	12	92.3
Modern human attraction	21	17	81
Abstract humanistic attraction	7	4	57.1
Other cultural landscape	1	1	100
Other natural landscape	1	1	100
Tourism services	7	4	57.1
Other services	1	—	—
total	95	75	76.5

Data sources and research methods

Data sources

Based on the research in prefecture level or above city as the research object, mainly collected the number of tourism and tourism revenue data, the total number of tourist revenue including the number of inbound tourism and domestic tourist arrivals ofeight counties such asXining city, Huangzhong county, Huzhu county,Datong county,HuangYuancounty,Gide county,Qilian county, andMenyuan county.Data from Xining city, Huzhu county, problems during your DE county, sea characters, Huangyuan county, county, Qilian, MenYuan county government website and the statistics bulletin of the national economy and social development, Xining city statistical yearbook, the distance between each two cities on the basis of highway distance (considering regional tourism mainly car), the data source from http://ditu.google.cn/maps.

Research methods

Tourism economic linkages

Tourist center cities have a great influence on the development of tourism economy in the surrounding area, which is closely related to the strength and weakness of the city.Tourism economy connection degree can be used to measure the strength of the regional tourism economic ties between the size, it can not only reflect the central city of the area around the tourism economy radiation ability, also can reflect the area around the acceptance of center city tourism economic radiation ability[4].Contact gravity model is to measure the economic strength of a common method, often used to analyze the degree of regional tourism economy relationship between units and direction, on the one hand reflects the core of tourism cities to surrounding areas of tourist economy overflow ability, at the same time also reflected the surrounding areas of radiation.In this paper, with the aid of tourism economic ties this model[5], think tourism economic ties and two cities the product of the total number of tourists and tourism revenue were positively correlated, and negatively correlated to the distance between the two cities, its computation formula is as follows:

$$R_{mn} = \frac{\sqrt{P_m C_m} * \sqrt{p_n C_n}}{D_{mn}^2} \quad （1）$$

R_{mn} is for tourism economic relationship strength；P_{mn} and P_n is the total number of tourists for the city m and n （it includes the number of inbound tourists and the number of domestic tourists）, C_m、C_n is the total tourism revenue for city m and n （Unit: 100 million yuan）；D_{mn} is the distance between cities m and n.On the above in this paper, by using the gravity model to measure large Xining intensity of tourism economic links between cities, and then determine the city tourism economic radiation ability and Xining network development situation of tourism economy.

Index of first degree

The first degree was first used in urban geography research, and the first degree was also known as [6].It is used to analyze the scale distribution law of regional cities [7].Since the beginning of the 21st century, scholars have extended to theory of the urban primacy ratio from the traditional country and the population area to the study of regional economy[8-10].The first degree of tourism is

mainly used to measure the concentration of regional tourism scale and tourism economic distribution. The calculation formula is as follows:

$$S = P_1 / P_2 \quad (2)$$

The first degree is also defined as the first degree of tourists; and the number of tourists in the first and second cities.In the follow-up study, some scholars pointed out that the first degree should be based on economic potential or economic aggregate size, i.e., GDP. Therefore, the index formula of the first degree of tourism economy can be expressed as:

$$S' = P'_1 / P'_2 \qquad (3)$$

Among them, represents the first degree of tourism economy;And total tourism revenue for the first city and the second city.The tourist economy is the most important core city, its attraction and radiation force is stronger, is the tourism economic center in the whole circle.The higher the first degree, the stronger the cohesion and agglomeration function of the tourism circle, but the related research also shows that the first degree is negatively correlated with the regional tourism economic development level.In less developed areas, growth tends to be concentrated in individual cities, and the first degree increases.The higher the first degree, the stronger the cohesion and agglomeration function of the tourism circle, but the related research also shows that the first degree is negatively correlated with the regional tourism economic development level.In less developed areas, growth tends to be concentrated in individual cities, and the first degree increases[11].

Tourismgini coefficient

Gini coefficient is the earliest indicator of social wealth distribution, put forward by economistsgini, and to lead by professor Marshall, calculation formula for the appropriate improvement, get travel Gini coefficient, measure the city's tourist area gathered, its computation formula is as follows:

$$G = T / 2S(n-1) \quad (4)$$

When T for travel between cities when the sum of the absolute value of the difference between the total number of people, S is the total number of tourist visits to the cities in the tourism circle combined, n is the number of cities in the tourist circle, then the gini index can be calculated. When T is the urban tourism between the sum of the absolute value of the difference between the total revenue, S the sum of each urban tourism revenue ,and n is the corresponding to the above quantity within the city, the gini coefficient G'can be calculated tourism scale.Between 0 and 1, the closer to 0, the more uniform distribution of tourist elements in each city;The closer to 1, the more concentrated the travel factor distribution.Based on this, the index can be expressed as:

$$R = G' / G \quad (5)$$

The index of the gini quotient is greater than 1, indicating that the distribution of tourism economic distribution is greater than that of tourists.The index is less than 1, which indicates that the tourist area is more concentrated than the tourist economy.The closer the gini index is from 0 to 1, the more balanced the population and the economic harmonization of the urban agglomeration, whereas the opposite results.

Calculation and analysis of results

analysis of tourism economic ties

On the above various Xining city city tourism economic ties between the degree of value, can be seen from table 2, Xining city to each city's tourism economy connection degree value is generally

larger, among them, the strongest is with Huzhu county of tourism economy, of course, this is closely connected with its resource advantage;In the following sequence, there are also Haiyan county, Qilian county;The last one is Guide county. Guide county is more than 100 kilometers from the provincial capital Xining city, and it is still relatively far away.Combined with infrastructure stays in the state of natural and spontaneous, lack of unified planning and requirements, a serious shortage of funding, tourism commodity development level is low, the small variety, can't meet the diverse needs of tourists.Consequently, the tourism economic radiation intensity is the lowest in Xining city.From other travel between the cities, economic strength, the top is a degree of mutual contact between the chase of R = 26.58, the other values are under 10, 22 and set of values and even less than 1, the seven cities except Xining city, relatively, chase the radiation intensity is bigger, but its radiation power is short of Xining city.

Table 2.Xining city and the surrounding cities between the tourism economic value

city	Xining	Huzhu	Datong	Huangyuan	Guide	Haiyan	Qilian	Menyuan
Xining	—	416.47	421.14	78.58	3.87	97.3	30.06	1.12
Huzhu	416.47	—	26.58	3.31	0.19	5.11	1.99	0.86
Datong	421.14	26.58	—	3.35	0.19	5.57	2.01	1.31
Huangyuan	78.58	3.31	3.35	—	0.06	3.61	0.65	0.2
Guide	3.87	0.19	0.19	0.06	—	0.12	0.05	0.02
Haiyan	97.3	5.11	5.57	3.61	0.12	—	2.19	0.52
Qilian	30.06	1.99	2.01	0.65	0.05	2.19	—	0.61
Menyuan	1.12	0.86	1.31	0.2	0.02	0.52	0.61	—

evolution of the first degree index

The first degree is an important measure of city scale distribution.The primary basis is the size of the economy, or GDP per person.In terms of total tourism revenue, total number of tourists and resource endowments, chase is the first city in the big Xining city tourist area, while mutual assistance is the second city.The dislocations of the first degree of tourist economy and the first degree of tourism economy reflect the difference of economic benefits.This paper selectsthe number of total revenue of tourism, tourist big Xining city tourist area's first degrees to the evolution of (data from statistical yearbook) from 2006 to2015 in Xining city. The calculation results are shown in fig. 2:
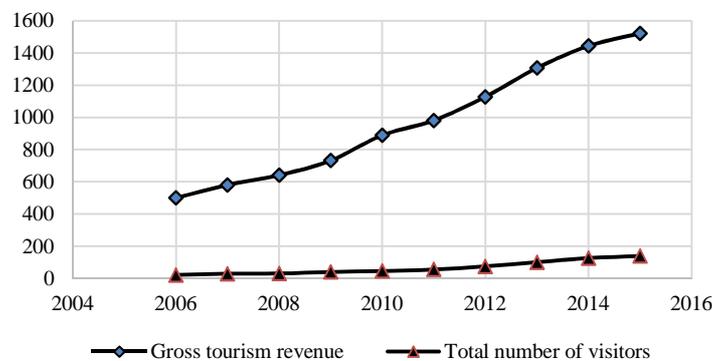

Figure 2 .Da Xining city tourism circle city tourism first degree change map

As shown in figure 2, between 2006 and 2015, the first change in the total number of tourists and the total income of the great Xining city tourist group was not unified.The total tourism revenue rose from 21.7 in 2006 to 140.2 in 2015, a relatively obvious increase, indicating the distribution of tourism income in the inner cities.From 2006 to 2015, the total revenue of tourists gradually

increased.The increase in the total number of tourists has been increasing.The total number of visitors is also increasing, but the increase is not obvious.It has been growing steadily since 2010.Overall, the gap between total tourism revenue and the total number of tourists has narrowed, and the first degree of tourism revenue varies with the total number of tourists.

Travel gini coefficient changes

The gini coefficient and the tourism economic Gini coefficient, which calculate the annualtourism of the big Xining city tourism circle, found that between 2006 and 2015, the two values were between 0.14 and 0.37, and the overall trend was expanded.The tourism scale of the gini coefficient shows a wave type change, "rise-drop-rise", the value has not decreased, and is on the rise trend.In terms of development trend, both the gini coefficient downward trend, the scale of tourism gini coefficient fell relatively obvious, 10 years, the tourism scale gini coefficient fell 0.21, tourism economy gini coefficient fell 0.13, in terms of the above two points, the surrounding city tourism development speed Yu Xining city, corresponding between cities within the agglomeration of economic distribution to a greater extent than distribution of tourists, tourism revenue distribution is relatively concentrated, distribution of tourists relatively scattered.The gini coefficient showed a trend of wave rise, unbalanced development shows that tourists and income, is not conducive to the development of regional tourism economy, also has the very big development space, large Xining city corresponding to equilibrium.

The characteristics of tourism scale distribution in Xining city

Comprehensive the above analyze, and related information on the above travel large Xining city size distribution characteristics can be summarized as follows: single point of connection.The tourism development of the whole big Xining city tourism circle is centered on the outer diffusion of.Influenced by geographical distance, the distance and near-radiation effects are decreasing.Xining city's tourism development direct radiation and drive the development of the whole region, it has become the dominant force of the evolution of tourism scale system in the tourism circle of big Xining city.From the form and layout, large Xining city corresponding scale formed in the process of growth and development of tourism，the east and the west in figure 1.Because the distance between this line is closer, the transportation is convenient.The opportunity for strong tourism growth is greatly increased.The regional differences in the tourism circle are mainly manifested as the core-edge difference, the difference between east and west lines.The difference between the east and west lines shows that the first line of development is significantly faster than the north-south line.Whether the core, the marginal difference, or the difference between the east and the west, these differences are caused by the difference in the traffic location conditions.On the above present large Xining city "more broadly" tourism layout, both as a regional "main centre" Xining city and mutual aid, spillover effects are insufficient, the surrounding areas of radiation effect, after all, is limited, the overall or gradually balance the scale of regional tourism.

Conclusions and countermeasures

Based on the tourism economic ties and tourism first degrees and the gini coefficient for large index on the above nearly a decade of Xining city travel size distribution and spatial characteristics are analyzed, preliminary explored the tourism and big on the above development of Xining cityXining city interactive effect.Since 2010, the tourism income distribution in the circle has become more reasonable and the flow of tourists is relatively adequate.From the tourism gini coefficient, the tourism economy and tourism scale in the circle tend to be dispersed, and the scale development of regional tourism presents a single point of aggregation, axial directivity, internal

differentiation and divergence of structure.Driven by policy support, growth and traffic conditions, the influence of such factors as the above in Xining city continuously strengthen the connection between the cities and interaction, but its tourism economy contact strength and the scope and the forecast model still has certain gap.There is a lack of influential core cities in the circle. The radiation scope of the central city is limited.Tourism resources scattered, unequal distribution of productive elements in tourism, tourist economy internal significant difference, low level of integration, tourism infrastructure is weak, because of the traffic bottleneck restriction, influence the development of Xining citycorresponding tourism industry.Xining city is far from the other cities, and the problem of this kind of regionalstructure makes the tourists stay in relatively short time,and the tourism
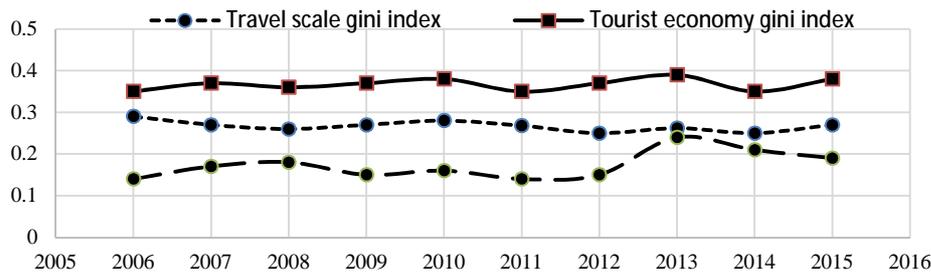

Figure 3.Xining tourism circle tourism Gini coefficient changes map

Economicoutput and benefit are poor.In addition, Xining city first-class tourist destination construction, cannot be separated from the surrounding cities independently developed.Regional tourism productivity distribution is not balanced, the idea of cultural innovation without formation, slow development of cultural productive forces, to attract high-quality talent mechanism is not sound, the lower level of regional integration, regional internal network not fully spread out, in all major on the above development of Xining city in the spheres of highlight, form the development phase.In view of the above differences and the difference of geographical space of internal and external, in view of the above competition pattern"has attracted by cognitive-can enter-can be" a necessary condition for, this paper argues that the practical implementation of "supporting the outer ring" and "promote the north-south line" strategy is an important support to improve the overall development of regional tourism attraction.

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