# Research on the Symbiosis Development Path of the Pilot Zone in the Yangtze River Delta

# -- Based on the Content Analysis of Network Text

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## Abstract

The regional development of the pilot zone has become a national strategy. The five towns (Jinze Town, Zhujiajiao Town, Xitang, Lili, YaoZhuang) in the pilot zone of the Yangtze River Delta have spatial proximity and historical and cultural homology, which determines that the homogeneity of tourism products is serious, and space competition is prone to intensification, which is not conducive to the sustainable development of tourism. At present, the academic circles still lack comprehensive attention to the practice of tourism symbiosis development in small towns. This article uses the five small towns in the pioneering area as the research object, uses the octopus collector to collect a total of 32 travel notes and 227 comments, and uses the RostCM6 software to analyze the commonality and individuality of the five small towns and perform word frequency analysis and social network semantics analyze, and then plan the symbiosis development path of the small town group based on the analysis result. It is found that: the five small towns in the pilot zone have similarities in history and culture, and show their individual characteristics in tourism culture, tourism environment, tourism attractions, and tourism services. The five small towns in the pioneer zone can form a symbiotic development path through the three directions of knowledge and culture, life experience, and leisure and entertainment. These conclusions clarify the symbiosis development path of the small town group, which can effectively help the small town group managers to adopt strategies to relieve the pressure on the development of the small town group caused by the homogenization of tourism products. Continuous development provides theoretical basis and practical evidence.

### **Keywords**

Pilot Zone of Demonstration Zone of the Yangtze River Delta; Small Town; Symbiosis; Content Text Analysis.

# 1. Introduction

In May 2019, the central government issued the Outline of the Yangtze River Delta Regional Integrated Development Plan, which clearly proposes to build the Yangtze River Delta Ecological Green Integrated Development Demonstration Zone (hereinafter referred to as the Demonstration Zone) within about 2,300 square kilometers in Qingpu, Wujiang and Jiashan at the junction of Jiangsu, Zhejiang and Shanghai to play a demonstration and leading role in the integrated high-quality development of the Yangtze River Delta. Jinze and Zhujiajiao in Qingpu District, Lili in Wujiang, Xitang and Yaozhuang in Jiashan are included in the early start area of the demonstration zone. A look at the research on the early start area in the tourism sector reveals that there are fewer overall studies on the early start area and only separate studies on the town. For example, Yang Ting explored a new model of tourism development planning for ancient towns, taking Jinze town as an example[1]; Dong Lu explored the design of rural

greenways in Zhejiang in the context of ecotourism development, taking Yaozhuang town in Jiaxing City as an example<sup>[2]</sup>; Li Changjiang explored the protection and tourism development of historical and cultural towns, taking Zhujiajiao town as an example[3], etc. Since the five towns, spatial proximity and cultural homogeneity, make their tourism products homogenous, coupled with the sharing of tourism market, make the competition among the five towns more and more intense, therefore, it is crucial to study the symbiotic development path of the towns for the healthy development of the early start-up area.

The term "symbiosis" was first introduced in 1897 by German fungal biologist De Berry, which originally referred to the material connection between different species of organisms and included the categories of mutualistic symbiosis, biased symbiosis and parasitism[4]. In 1984, symbiosis theory was introduced into the field of tourism research by Peter et al. It means that under certain environmental conditions, competing individuals with similar tourism resource endowments in neighboring regions interact with each other in a certain mechanism or pattern, so as to achieve mutually beneficial symbiosis. Generally speaking, symbiosis consists of three elements such as symbiotic unit, symbiotic environment and symbiotic mode[5].

The research on the relationship between neighboring tourist attractions has gone through a three-stage development process from competitive relationship to cooperative relationship to competing relationship[6], and gradually developed into a symbiotic research stage[19]. The research based on symbiosis theory to explore the spatial relationship of tourism is relatively lacking. In recent years, the research on symbiosis theory in tourism has mainly focused on rural tourism. For example, based on the symbiosis concept, Zhang Jinming explored the poverty alleviation path of scenic area-dependent rural tourism[7]; Wang Qingsheng et al. studied the precise poverty alleviation mode and path of rural tourism based on symbiosis theory[8]; Zou Tongzhan et al. analyzed the symbiosis mechanism of rural tourism operators by taking Beizhai village in Huairou District, Beijing as an example[9]. Besides, there are also symbiosis studies on theme parks[10] and inter-regional[11]. Studies on the symbiosis of small towns focus on the symbiotic development of small towns[12-14], evolutionary patterns[15], and spatial competition and regional cooperation in tourism planning [16]. Among the studies on the symbiotic development of small towns, Liu Shuchang et al. explored the symbiotic development path of Yanfeng town in Haikou City [12]; Mao Changyi et al. explored the symbiotic development of 16 ancient towns with similar tourism resources in Chongqing[13]; Zhou Lijun studied the competing development model of tourism towns on the western slope of Changbai Mountain based on symbiosis theory [14].

The spatial proximity and cultural homogeneity of the five towns make them prone to fierce competition, and how to alleviate the competition among them has become an important issue for industry and academic research. In view of this, this study introduces the symbiosis theory to investigate the symbiotic development paths of the five tourism towns in the early start-up area, which can effectively help the town managers to adopt strategies to alleviate the pressure brought by the homogenization of tourism products to the development of the town clusters, and then promote the sustainable and healthy development of the town clusters.

# 2. Research Design

### Method 2.1.

Compared with traditional research methods, the content analysis method can better explore the real feelings and perceptions of tourists, and the research findings are more representative. Yun He et al. pointed out that using content analysis method to study the resources, space and themes of regional tourism is beneficial to promote the healthy development of regional tourism[17], therefore, this study used content analysis method to explore the symbiotic development path of five small towns.

### 2.2. **Data Collection and Processing**

In this paper, the names of the five towns are used as keywords to search for relevant travelogues and reviews in Ctrip, Ma Hive, Go Where and other well-known domestic online travel websites, and the Octopus collector is used to collect texts with posting dates within the time period of September 1, 2018-December 31, 2020, and after finishing, 32 travelogues and 227 reviews are finally collected, totaling 73565 words. Firstly, the misspelled words were corrected to complete the unification of the sample format. Secondly, the words and phrases expressing the same meaning are replaced, as shown in Table 1, and the collated text is saved as a txt file. In addition, a custom word list is created in user.txt, and relevant proper nouns, such as "Liu Yazi", "Fangsheng Bridge", "Puji Bridge", etc., are included in the custom word list to avoid In highfreinvalid.txt, create a filter word list to include prepositions and conjunctions such as "down", "located", "so" and other words that are not closely related to the common features of the town. The prepositions and conjunctions such as "down", "located", "so" and other high-frequency words that are not closely related to the common features of the town were added to the filter word list. The collected texts were then analyzed by RostCM6 software (Wuhan University version) for word frequency analysis and social network semantic map analysis.

Iable 1. Semantic substitution table				
Original expression	Replace the expression			
This place, here, there	Corresponding scenic spots			
The commercial atmosphere is not very strong, there is little	The commercial			
commercialization, there are few commercial shops	atmosphere is not strong.			
Few people, few people, few visitors, few people.	Few tourists			
Antique and ancient	Ancient simplicity worth playing tickets free			
Recommended, worth seeing worth playing				
No tickets, no need to buy tickets				

# Table 1 Compartie substitution table

# 3. Data Analysis and Results

### **Expression of Common Characteristics** 3.1.

The collected text is processed by word separation to remove meaningless and words that are not relevant to the case place. Then the socio-semantic network analysis was performed. From the lexical aspect, these words are mainly nouns, and the word "tourists" appears most frequently; the nouns of places related to the case place also appear, such as "Jiaxing" and "Jiashan"; the case The terms "ancient town", "ticket", "Jiangnan", "water town", "architecture", etc. are also found. The appearance of these terms represents the impressions that the five towns can leave on tourists after they have actually visited them. The adjectives "quiet", "pleasant" and "beautiful" reflect the tourists' recognition of the image of the tourist destination, among which "quiet" and "pleasant" represent the perceived image of the tourist destination environment in the minds of the tourists.

Extracting the characteristic words with a frequency of more than 10 in each town, it is found that: (1) All five towns have "architecture", which shows that architecture is the cultural carrier of the town. (2) "quiet", "cozy", "quaint", "preserved", "historical " and "atmosphere" are common words in Jinze Town, Lili Ancient Town and Xitang Ancient Town, which indicate that the original appearance and environment of the ancient town are the main objects perceived by tourists. (3) The words "less commercial" and "original" are common to Yaozhuang Town, Lili Ancient Town and Jinze Town, which show that new tourists are keen on originality.

# 3.2. Expression of Personality Characteristics

The high-frequency words with a frequency greater than 3% in each text were extracted, 48 in total, with a word frequency of 1356 times. The high-frequency words were sorted by word nature and word meaning, and it was found that the high-frequency words were mainly reflected in four aspects of tourism culture, tourism environment, tourism attractions6 and tourism services, and the top 6 high-frequency words of various characteristics of the case place were taken.

	Jin Ze	Zhu Jiajiao	Li Li	Xi Tang	Yao Zhuang
Tourism culture	5%	29.4%	28%	8.8%	
	Buddhism (20)	CulturalCenter(30) Ming Qing (38)	LiuYazi (48) Wu GE Festival (31)Zhou Yuanli(40)	WuYue(22)	
Tourism environment	39.7%	8.6%	35.3%	4.4%	34.5%
	quite(54) Ancient simplicity (53) jiangnan (37)	Ancient simplicity (10) quite (10)	Ancient simplicity (30) The commercial atmosphere is not strong. (43) quite (33) jiangnan (44)	quite (11)	quite(13) beautiful(17)
Tourist attractions	45.2%	30.7%	26.6%	33. 6%	31%
	Puji Bridge (37) Ruyi Bridge (31) Fangsheng Bridge(30) Wanan Bridge(23) YihaoTemple(23) Linlao Bridge(20)	FangshengBridge(30) Class topiary(18) Yuanjin Temple(13) Class topiary(10)	Chinese Tin Ware Museum (15) Chinese Tin Ware Museum (13) LiuYazi Memorial Hall (48) alley (37)	Bar(35) Promenade (23) Inn (26)	Peach blossom island (27)
Tourism service	10.1%	31.3%	10.1%	53.2%	34.5%
	Tourism service (13) Dried bean curd (12) Catering industry (10)	The subway is convenient(32) Hotel (40)	Admission is free (43)	Snacks (50) Shopping (46) Accommodation is convenient (37)	Mushroom (20) Grass (10)

**Table 2.** List of high-frequency words for the characteristics of the five towns

As can be seen from Table 2, each town has its own characteristic, therefore, the development orientation and image orientation of each town should be clearly defined to form a differentiated development path.

As shown in Table 2, the tourist attractions of Kanazawa town (45.2%) accounted for the highest percentage among the four levels, which indicates that the most impressive thing for tourists after visiting Kanazawa town is the bridges in Kanazawa town. Jinze Town is a famous "bridge town" in Shanghai, and most of the bridges in Jinze Town are historical bridges. So far, Jinze town retains seven ancient bridges built in the Song, Yuan, Ming and Oing dynasties, known as "the first bridge township in Jiangnan". Therefore, Jinze town should focus on developing bridge culture, and can achieve the same popularity as "Zhaozhou Bridge" through publicity.

As can be seen from Table 2, Zhujiajiao's tourism services in the four dimensions in the highest percentage of 31.3%, which indicates that Zhujiajiao's tourism services and facilities are relatively complete, and there are many stores in the town, which can develop food culture.

As can be seen from Table 2, the tourist environment in Lili ancient town has the highest percentage of 41.4% among the four dimensions, which indicates that the environmental atmosphere of Lili ancient town is one of its major advantages in the impression of tourists. Therefore, Lili ancient town can take advantage of this advantage and combine the most characteristic alleyways to form a unique town culture.

As shown in Table 2, Xitang has the highest percentage of tourist services at 53.2%, followed by tourist attractions at 33.6%, which indicates that the unique architectural style of Xitang such as bars, promenades and inns and their perfect service facilities are the most important perceived impressions of Xitang by tourists. Therefore, Xitang can use its unique architectural style and perfect tourism services to differentiate itself from other towns.

As can be seen from Table 2, Yao Zhuang town, tourism environment, tourist attractions and tourism services account for a similar proportion, 34.5%, 31% and 34.5% respectively. Yao Zhuang can focus on creating tourism projects with "Peach Garden" as the IP, but it should pay attention to controlling the flow of visitors. Yao Zhuang can focus on creating a tourism project with the IP of "Worldly Peach Blossom Island", but should pay attention to controlling the flow of visitors to avoid being incompatible with the worldly peach blossom island a place with a quiet environment, free from outside influences and a peaceful life [18].

### **Symbiotic Path Analysis** 3.3.

The choice of differentiated tourism development paths for small towns is to be able to reflect the individual characteristics of each town and jointly build the overall image of the town cluster, thus improving the experience of tourists and thus promoting the sustainable development of the local and tourism industry.

This paper clarifies the preferences of the source market based on the tourists' perception of the commonality of the town group and the perception of the individuality of the town. Therefore, combining the results of personality characteristics analysis, the development paths of the five small towns in the first demonstration area can be identified as: knowledge and culture, life experience and leisure and entertainment.

The knowledge and culture town should fully explore the local characteristics of the culture based on the essence of traditional culture, and inject modern cultural elements into it, so as to achieve a perfect integration between the two. The core culture of Jinze town is bridge culture. It should strengthen the cultural brand of "the first bridge township in the south of the Yangtze River", on the one hand, explore the local culture of the bridge; on the other hand, strengthen the restoration and protection of the bridge to form a unique bridge cultural tourism destination.

The life experience town should make reasonable use of the unique ecological and humanistic environment and local culture, improve the related infrastructure, and convey a concept of peace and happiness to tourists through the lifestyle of local residents and the unique architecture of the town to form a life experience area with local characteristics. Yao Zhuang can focus on creating tourism projects with the "Worldly Paradise" IP, but it should pay attention to controlling the flow of visitors and not to violate the concept of Worldly Paradise. Leisure and entertainment type towns form a leisure and entertainment area that integrates historical landscape with modern facilities by appropriately carrying out leisure and entertainment activities. Zhujiajiao and Xitang towns, give full play to their gastronomic advantages, fully explore the local traditional culture behind the food, and combine the food with culture and unique architectural style, while some recreational facilities can be added appropriately to enhance the entertainment of the towns.

# 4. Conclusion

First of all, the common features are: historical culture, architecture and quiet tourism environment; the environment of Jiangnan town is the basic perceptual object of tourists' experience, and its preservation status and the degree of cultural connotation excavation are the focus of tourists' attention and directly affect its perceptual experience value.

Secondly, the individual characteristics are as follows: Jinze Town is more prominent in terms of tourist attractions, with seven ancient bridges built during the Song, Yuan, Ming and Qing Dynasties preserved to this day, which is called "the first bridge township in Jiangnan"; Zhujiajiao Town is relatively well developed and prominent in terms of tourist services, with stores everywhere in the town; Lili Ancient Town is less commercialized and more prominent in terms of tourist environment. Both Xitang and Zhujiajiao are relatively well-developed towns with more stores, but Xitang can be differentiated from Zhujiajiao by strengthening its unique architectural style such as bars and promenades.

Finally, the symbiotic development path is divided into three directions: knowledge and culture, life experience, and leisure and entertainment. (1) Knowledge culture type: Jinze Town fully explores the bridge culture, combining traditional culture with modern culture to form a unique bridge culture town; Liuli Ancient Town, Liuyazi culture, and music culture, can regularly hold "Wu Song Festival" activities, local culture into the music, to attract music-loving tourists to participate in activities, and thus This will attract music-loving tourists and promote the culture of the time. The town of Kanazawa and the ancient town of Lili can be combined to form a study tour to attract more scholars to come and study. (2) Life experience: With the help of the peach blossom island in northern Zhejiang Province in Yaozhuang Town, picking activities will be held so that visitors can experience picking activities and feel the beautiful environment of Yaozhuang Town like a "paradise". (3) Leisure and entertainment type: Zhujiajiao and Xitang towns, give full play to their gastronomic advantages, fully explore the local traditional culture behind the food, combining food with culture and unique architectural style, and at the same time can appropriately add some leisure and entertainment facilities to enhance the entertainment of the ancient village town.

Although this study has important theoretical and practical significance in exploring the symbiotic development path of the five towns in the first start-up area, there are still some shortcomings: on the one hand, the overall popularity of the five towns is not high enough, and the number of tourists coming to visit is relatively small, so the sample size obtained is relatively small. On the other hand, the data obtained in this study are network data, and there may be some deviation in the selection of samples. Therefore, future research needs to expand the scope of samples and further explore the development path of five towns in the first start-up area with a view to further enriching and expanding the research conclusions.

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