

Postprint: A Study on the Underlying Mechanisms of Environmental Space Evolution in the Surrounding Areas of Rural Folk-house Type Scenic Areas in Shanxi

Authors: Hu Weixia

Date: 2021-02-13T00:00:00+00:00

Abstract

Over the 40 years of reform and opening-up, rural tourism development has made significant contributions to the preservation of rural settlements within China's diverse industrial structures. In the new-era macro-tourism development paradigm, the scope of tourist activities is no longer confined within scenic areas, but extends to the surrounding environment and regional context; the full utilization of surrounding environments is crucial for tourism development. This study takes the surrounding environment of Huangcheng Xiangfu, a rural manor scenic area, as a case study, employing statistical analysis, ENVI interpretation, and GIS methods to conduct an in-depth analysis of its evolution mechanism. Integrating three periods of the surrounding environment's spatial evolution with three influencing factor layers—innate conditions, management, and demand—this study reveals that the fundamental driver of the surrounding environment's evolution mechanism is the management layer factor, namely, the synergistic effect of a collective system characterized by strong autonomy and a relaxed environment, together with goal-oriented and diligent management personnel. This evolution mechanism holds promotional significance for ancient village and rural residential tourism development, as well as rural revitalization. Among these factors, the demonstration effect of the collective economic system results in a unified management entity for both the scenic area interior and its surrounding environment, which facilitates coordinated management, provides a strong demonstration effect for other rural manor tourism development in Shanxi, and offers micro-level perspectives for national and global governance.

Full Text

Spatial Evolution Mechanism of the Peripheral Environment of Local Village Residential-Style Scenic Spots in Shanxi Province

HU Weixia^{1,2}, XIE Yingying²

(1 College of History and Tourism Culture, Shanxi Normal University, Linfen 041000, Shanxi, China;

2 College of Geography Science, Shanxi Normal University, Linfen 041000, Shanxi, China)

Abstract

Over the past four decades of reform and opening up, rural tourism has made significant contributions to preserving rural settlements within China's diverse industrial structures. In the new era of large-scale tourism development, tourist activities are no longer confined to scenic areas themselves but extend to their peripheral environments and regional surroundings. Consequently, the effective utilization of peripheral environments has become crucial for tourism development. This paper examines the peripheral environment of the Royal Prime Minister's Palace—a village courtyard-style scenic spot in Yangcheng County, Shanxi Province—using statistical analysis, ENVI interpretation, and GIS to conduct an in-depth analysis of its evolution mechanism. By integrating the three-stage spatial evolution process of the peripheral environment with factors from three impact layers (congenital conditions, management, and demand), the study reveals that the fundamental driver of this evolution mechanism is the management layer. Specifically, the synergistic effect of a collective system with strong autonomy and a relaxed operating environment, combined with managers who have clear objectives and work diligently toward them, constitutes the essential cause. This evolutionary mechanism holds promotional significance for tourism development in ancient villages and rural residential areas, as well as for rural revitalization efforts. The collective ownership system creates a unique management entity for both the scenic area and its peripheral environment, facilitating coordinated management and serving as a strong demonstration model for tourism development in other rural courtyard villages in Shanxi. This study also provides a micro-level perspective for national and global governance.

Keywords: Royal Prime Minister's Palace; village courtyard-style residential scenic spot; peripheral environment of scenic area; deep evolution mechanism

1. Study Area and Research Methods

The Royal Prime Minister's Palace is a Ming-Qing dynasty fortress-style courtyard residential complex located in Huangcheng Village, Yangcheng County, Jincheng City, Shanxi Province [Figure 1: see original paper]. It was the former residence of Chen Tingjing, a renowned prime minister during the Kangxi

Emperor' s reign and chief editor of the *Kangxi Dictionary*. The entire architectural complex consists of inner and outer cities covering an area of 2.1×10^5 m². The scenic area began tourism operations in 1998 and has been honored as the "Oriental First Double-Walled Fortress," holding numerous titles including a national AAAAA-level scenic spot, a famous historical village, and a top-tier moderately prosperous village. It comprises 15 attractions forming a cultural-ecological scenic area, with the core attraction being the double-walled fortress courtyard of the Royal Prime Minister' s Palace.

The study area was selected for its typicality and significance for three reasons: (1) Despite poor location conditions and low initial recognition in the south-eastern Jinshan mountainous region, it has achieved remarkable development speed and become a sought-after tourist destination; (2) The tourism-oriented construction of its peripheral environment is highly developed, with substantial changes and rapid evolution; and (3) It represents the best-performing courtyard-style residential scenic spot in Shanxi in terms of tourism benefits, peripheral service operations, and spillover effects on surrounding attractions.

Research Methods and Data Sources:

- (1) **Field Investigation.** The Royal Prime Minister' s Palace serves as a practice base for the researchers' institution, with accumulated records and data since 2002. The most recent field survey was conducted from May 25-27, 2018 (including weekends), involving on-site visits to various attractions under the Huangcheng Xiangfu Group. Researchers observed the latest tourist volumes and business conditions, interviewed Manager Zhang and Manager Miao of the Royal Prime Minister' s Palace, Manager Song of Jiunv Immortal Lake, and Manager Lü of Xiangfu Manor about the scenic area' s history, experiences, impacts, and current issues, and administered 100 questionnaires (with 98 valid responses). After statistical and qualitative analysis, these materials and data informed various arguments in the paper.
- (2) **Statistical Analysis.** Data on tourist arrivals, tourism revenue, and comprehensive income for the scenic area, as well as village population and per capita income, were provided by the Huangcheng Xiangfu Group and the village collective, and cross-checked with the Yangcheng County Statistical Yearbook. Relevant data from the Huangcheng Village and Group websites were incorporated into the analysis of the village' s evolution history, primarily using statistical analysis methods.
- (3) **GIS Analysis.** Landsat TM and Landsat7 remote sensing image data for the evolution nodes of the peripheral environment were downloaded from the Geospatial Data Cloud Platform. Remote sensing images of the peripheral environment around the Royal Prime Minister' s Palace were processed using ENVI software for visual interpretation, obtaining land use types and areas at six temporal evolution nodes, which were mainly used in the evolution process analysis.

2. Spatial Evolution Process of the Peripheral Environment

The peripheral environment of a scenic area primarily serves tourists, with infrastructure and activities arranged to complement the scenic area's landscape and functions. It exists in the outer periphery, intricately connected to the scenic area, making its evolution inseparable from tourism development. Based on major economic indicators and land use conditions at different time nodes, the spatial evolution of the Royal Prime Minister's Palace's peripheral environment can be divided into three periods.

Initial Exploration Period (1998-2002): Surrounding the sole core attraction, the peripheral environment began to be equipped with basic and essential service facilities, limited to the entrance and nearby areas [Figure 4a: see original paper]. During this period, the scenic area had little reputation and few tourists. The tourism industry had been positioned as a new growth point of the national economy, and around this time, tourism development flourished across China, awakening awareness for the restoration and development of village residences and ancient buildings. Huangcheng Village, located in mountainous terrain with rich coal reserves, had relied primarily on coal income before 1998. However, with depleting resources, the village committee decided to explore a path of sustainable economic development, making tourism development of residential architecture a breakthrough. Consequently, large-scale tourism investment and development began at the core attraction (Chen Tingjing's former residence). Since tourist attractions alone were insufficient, basic tourism services and facilities became necessary, leading to initial construction of the peripheral environment with simple food, accommodation, and transportation infrastructure. However, this had not yet formed an industry.

Gradual Development Period (2003-2012): Multiple scenic spots were developed from near to far around the core attraction, with the peripheral environment showing a pattern of multiple attractions attached to the main one [Figure 4b: see original paper]. The scenic area became a national AAAA-level unit in 2008, with tourist numbers reaching a considerable scale requiring diversion and longer stays. Attractions such as Ziyunqian and Xishanyuan emerged in the peripheral environment, forming a moderately prosperous new village that could provide farmhouse accommodation and meals while also offering sightseeing opportunities. In 2011, Xiangfu Manor was built to provide business conference and leisure vacation functions, and an ecological sightseeing garden was developed based on rural agricultural resources. To match the AAAAA-level scenic area standard and better serve tourists, the peripheral environment continued to optimize hardware conditions, adding more than a dozen tourism services and facilities beyond the original six tourism elements. The scenic area evolved from a single attraction to an attraction cluster, increasing tourist visit duration and enhancing reputation. Economic indicators during this period showed slow but steady improvement [FIGURE:2-3].

Rapid Expansion Period (2013-2017): Various attractions beyond the core

scenic spot were distributed in the peripheral environment and connected by internal transportation [Figure 4c: see original paper]. Xiangfu Manor and the ecological sightseeing garden are located north of Huangcheng Village on rolling hills, farthest from the Royal Prime Minister' s Palace. The scenic area became the only national AAAA-level scenic spot in Jincheng City in 2013. Accelerated urbanization and rapid rural tourism development created strong demand for traditional residences, nostalgic tourism resources, and pastoral landscapes—precisely what Huangcheng Village' s courtyard-style architecture could provide. Leveraging the brand effect of Shanxi' s courtyard complex group and the promotional momentum of the Qinhe River fortress group, the Royal Prime Minister' s Palace gained widespread fame, with tourist origins expanding from Shanxi, Henan, Shaanxi, and Beijing to the entire nation, and tourist arrivals growing rapidly. Around 2013 became an inflection point for growth in various tourism economic indicators [FIGURE:2-3], with peripheral environment economic benefits also rising rapidly. The scenic area integrated various attractions in the peripheral environment from near to far, with internal transportation connecting from south to north, primarily to link Xiangfu Manor and the sightseeing garden on the rugged mountain roads. Tourism reception facilities and agritourism projects developed to some extent, with tourism land use in the northwest of Huangcheng Village increasing substantially [Figure 5: see original paper]. However, due to natural conditions, tourism land use varied significantly across directions, influenced by transportation axes.

The expansion of the peripheral environment mainly included increased attractions, supporting service facilities, and growing participation of villagers in tourism services, though each stage had different emphases.

3. Evolution Mechanism

The evolution of the peripheral environment results from the combined influence of multiple factors, including village collective decision-making, residential fortress resources, accumulated coal capital, national tourism policies, tourist market demand, and villager participation. These can be synthesized into three layers: congenital conditions, management, and demand. The essence of the relationship is one of supply, demand, and intermediate coordination [Figure 6: see original paper].

3.1 Evolution Factors 3.1.1 Congenital Conditions Layer (Supply)

consists of three sub-factors: (1) **Excellent tourism resource endowment.** The scenic area is the former residence of Chen Tingjing, a prime minister during the Kangxi Emperor' s reign and chief editor of the *Kangxi Dictionary*. Comprising inner city, outer city, and Zhiyuan sections, it represents a fine example of rural courtyard ancient architecture. Built according to mountain topography with layered courtyards and staggered layouts, it exhibits distinctive characteristics of official mansions, scholars' hometowns, and Qinhe River fortresses, and houses precious historical materials including imperial inscrip-

tions personally bestowed by Emperor Kangxi and numerous stone inscriptions. It holds high value for cultural and rural tourism development. (2) **Coal capital accumulation.** Huangcheng Village has rich underground coal reserves and owned its own coal mines before developing tourism. Through low-cost expansion, risk-mortgaged shareholding, and mergers, the village promoted collective economic development and enriched villagers. By 1998, per capita net income reached 6,000 yuan, making it a moderately prosperous village in Yangcheng County. Accumulated coal capital supported industrial transformation and peripheral environment development. (3) **Natural geographical constraints.** Huangcheng Village is a mountain village with a river to its south. Except for small flat areas along both sides of the southern river, the terrain is mostly mountainous and sloped, particularly in the large northern section. Developing tourism and construction projects faced significant land use difficulties. [Figure 5: see original paper] shows the evolution pattern: development extended from the east side of the southern river section to the relatively flatter west side, with tourism land expanding north and northwest along rugged mountain roads. Compared with Shanxi's most famous courtyard groups located in basins, its natural conditions for positive evolution were the most challenging, yet its peripheral environment tourism development has been the most successful.

3.1.2 Management Layer (Coordination) consists of two sub-factors: (1) **Collective system.** The Royal Prime Minister's Palace only became a nationally protected cultural heritage site in 2006, unlike the Jinzhong courtyard group which is managed by higher-level authorities despite being locally situated, facing multiple constraints. The Royal Prime Minister's Palace is collectively owned and governed by the village committee without complex overlapping authority issues from peer or higher-level management departments. It possesses full rights to allocate assets and funds, with a unique management entity for both the scenic area and its peripheral environment. This ensures timely and efficient implementation of village committee policies and measures, making peripheral environment development continuous and sustainable. The management layer has strong autonomy and operates in a relaxed decision-making environment. (2) **Management personnel.** The keen insight, clear objectives, and steadfast efforts of decision-makers are indispensable factors promoting continuous positive evolution of the peripheral environment. Before the scenic area's AAAA-level upgrade, management clearly recognized the drawbacks and crises of the coal industry, saw the development potential of tourism as a green industry, and understood the growing public appreciation for cultural heritage with economic development. They therefore protected, restored, and utilized the Royal Prime Minister's Palace for tourism, continuously promoting rational development of tourism construction land in the peripheral environment. During the expansion period, management also recognized the huge market for leisure vacations and rural cultural tourism, overcoming natural obstacles to expand tourism land on hilltops with difficult terrain.

Management decision-making can be divided into internal and external aspects. The former mainly manifests as strict and orderly management within the Royal

Prime Minister' s Palace and its peripheral environment, along with humane guidance for villagers, such as encouraging participation in tourism services and providing training opportunities. The latter is primarily reflected in creative marketing and meticulous design control, such as establishing a professional marketing team for the Royal Prime Minister' s Palace and proactively collaborating with advanced platforms and media—far exceeding the typical understanding of a remote mountain village.

3.1.3 Demand Layer (Demand) consists of two sub-factors: (1) **Villager demand.** The village committee implemented a series of top-down measures to provide welfare for residents, meeting their needs and allowing them to fully appreciate the benefits of tourism development, thereby strengthening collective cohesion and increasing residents' happiness index. The scenic area created employment not only for local villagers but also attracted a workforce of 1,000 from nearby villages, including young laborers. Influenced by management decision-making, villagers hold positive attitudes toward tourism development. The tremendous power generated by tourism utilization of the peripheral environment has established an excellent model of tourism-driven rural revitalization. (2) **Tourist demand.** In the era of mass tourism, tourism product types have become increasingly diverse. Beyond the core element of "sightseeing," any other element can become a major tourism product, notably culinary tourism, with some tourists traveling primarily for food experiences. Tourist demands have shifted toward experience, leisure, uniqueness, in-depth learning, and wellness, determining how the peripheral environment is developed and what service facilities are provided. In the later stages of peripheral environment evolution, food and accommodation services were upgraded, with experiential Xiangfu Manor, ecological sightseeing gardens, and high-star leisure resort hotels meeting high-level demands for conferences and participation.

3.2 Evolution Mechanism Combining the evolution process and influencing layers, the evolution mechanism can be analyzed as follows [Figure 6: see original paper]:

(1) **Generation of tourism-oriented peripheral environment is driven by the management layer.** During the initial exploration period (1998–2002), the peripheral environment began to be equipped with basic and essential service facilities around the sole attraction. At this stage, the scenic area' s resource endowment and Huangcheng Village' s accumulated coal capital played roles, while natural geographical constraints were less binding due to limited extension scope. The key changes involved recognizing tourism as an industrial transformation breakthrough and investing coal capital into it, with the strong autonomy of the collective system providing implementation space.

(2) **Upgrading of scenic area and peripheral environment attraction clusters is influenced by the management layer.** During the gradual development period (2003–2012), multiple attractions were developed around the core scenic spot from near to far, with the main scenic area and periph-

eral environment attraction clusters beginning continuous upgrades to AAAA and AAAA-level units. In this evolution stage, congenital condition factors had minimal influence, while the demand layer played a leading role because the later-developed Xiangfu Manor and ecological sightseeing garden had no resource connection to the Royal Prime Minister's Palace's courtyard architecture but were related to rural agricultural landscapes and cool mountain weather. The ability to achieve continuous upgrades was primarily due to the efficient operation of Huangcheng Village's collective ownership system.

(3) Optimized utilization and mature layout of the peripheral environment are created by the management layer overcoming topographical difficulties. During the rapid expansion period (2013–2017), various attractions beyond the core scenic spot were distributed in the peripheral environment and connected by internal transportation, particularly the two farthest attractions—Xiangfu Manor and the ecological garden. During this period, both natural geographical conditions and tourism market demand influenced peripheral environment evolution. Traveling from the core attraction through the moderately prosperous new village to Xiangfu Manor required traversing long rugged mountain roads, presenting considerable difficulties for scenic area development and tourism land development near new attractions. The construction of such infrastructure and supporting facilities was still dominated by management layer actions. Additionally, continued optimization of the peripheral environment will further promote scenic area upgrading, which in turn requires new attractions that will drive further development of the tourism-oriented peripheral environment.

The evolution process and influencing layers both demonstrate that, at least in Huangcheng Village, the essence of promoting continuous deep evolution of the peripheral environment is the management layer factor—the combined effect of a collective system with strong autonomy and a relaxed environment, together with managers who have clear objectives and work diligently. Other factors from the congenital layer (tourism resource endowment, coal capital, natural geographical conditions) and the demand layer (villager and tourist demand) also play promoting, limiting, and guiding roles, but they are not the fundamental driving forces.

4. Discussion and Conclusions

(1) The peripheral environment of the Royal Prime Minister's Palace has developed in reliance on the scenic area since 1998, experiencing three evolution periods. The initial period featured single-point layout around the scenic area, the gradual development period formed multiple attractions, and the rapid expansion period created a peripheral environment connecting distant attractions via transportation lines. In summary, the evolution follows a point-surface-line pattern, differing from the fixed point-line-surface-network pattern at macro and meso scales of similar tourism units. These evolution processes can provide experience and reference for other rural residential tourism developments.

(2) From the evolution process of the Royal Prime Minister's Palace's peripheral environment, influencing factors can be synthesized into three layers: congenital conditions, management, and demand. Combining the evolution process with analysis of the three impact layers reveals that the management layer is the essential determinant of the evolution mechanism—the critical importance of coordination capacity between congenital conditions and demand. From the generation of tourism-oriented peripheral environment to the upgrading of scenic area and peripheral environment attraction clusters, and finally to the optimized axial layout of the peripheral environment, the management layer plays a leading and decisive role through the combined effect of an autonomous, relaxed collective system and goal-oriented, hardworking managers. Other congenital layer factors (tourism resource endowment, coal capital, natural geographical conditions) and demand layer factors (villager and tourist demand) also play corresponding promoting, limiting, and guiding roles, but are not fundamental drivers. This evolution mechanism has promotional significance for tourism development in ancient villages and rural residential areas, as well as for rural revitalization, and will promote its own future development.

(3) In discussions of peripheral zone evolution, geographical location, market environment, government policies, and land prices are often considered main factors. However, analysis of the Royal Prime Minister's Palace's peripheral environment spatial evolution mechanism shows different influencing factors. For example, remote geographical location—typically a disadvantage for other scenic areas—became an advantage here as it necessitates overnight stays; mountainous location with scarce land resources meant land rent and price had minimal impact; and collective ownership meant some government regulations had limited effect. The evolution mechanism of the peripheral environment can be attributed to management layer factors, where the collective system creates a unique management entity for both the scenic area and its peripheral environment, facilitating coordinated management and providing a strong demonstration effect for tourism development in other rural courtyard villages in Shanxi.

(4) The evolution and tourism expansion of the Royal Prime Minister's Palace's peripheral environment have driven the development of nearby ancient villages such as Guoyu Ancient Fortress and Tianguan Prince's Mansion. In the future, under the promotion of all-for-one tourism, peripheral environments of village-type scenic areas will break boundaries and connect into contiguous areas, with multiple village scenic areas sharing peripheral environments, focusing on regional landscape quality and integrating into regional joint development. Therefore, future research will continue to track continuous and discontinuous cross-boundary changes in scenic area peripheral environments and their 叠加 effects.

References

- [1] YI Ding. Developing rural tourism and promoting rural revitalization[N].

China Travel News, 2018-2-2(03).

- [2] HU Weixia, ZHU Linzhen, YAN Yu, et al. The spatial evolution mechanism about peripheral environment of the Royal Prime Minister Palace in Shanxi Province under the influence of tourism[J]. Journal of Arid Land Resources and Environment, 2018, 32(6): 202-208.
- [3] ZHANG Liming, ZHAO Liming. Authenticity development of cultural heritage landscape protection[J]. Research on Development, 2006, 3: 81-83.
- [4] HU Weixia. Study on tourist attractions peripheral environment: Definition, evaluation and coordination[D]. Xi'an: Shaanxi Normal University, 2008.
- [5] TEO P, HUANG S. Tourism and heritage conservation in Singapore[J]. Annals of Tourism Research, 1995, 22(3): 589-615.
- [6] MAIKHURI R K, NAUTIYAL S, RAO K S, et al. Conservation policy-people conflicts: A case study from Nanda Devi Biosphere Reserve (a world heritage site), India[J]. 2001, 2(3-4): 355-365.
- [7] PENDLEBURY J, SHORT M, WHILE A. Urban world heritage sites and the problem of authenticity[J]. Cities, 2009, 26(6): 349-358.
- [8] VECCO M. A definition of cultural heritage: From the tangible to the intangible[J]. Journal of Cultural Heritage, 2010, 11(3): 321-324.
- [9] ZHANG Yujing, LIN Miao. China's tourism development: New era, new direction and new thinking[J]. Modern Management Science, 2018, (2): 106-108.
- [10] WU Bihu, XU Xiaobo. Tourism oriented land development (TOLD): A new pattern of tourism-real estate development in China[J]. Tourism Tribune, 2010, 25(8): 34-38.
- [11] LEES L. The geography of gentrification: Thinking through comparative urbanism[J]. Programme Human Geography, 2011, 19(7): 25-26,31-34.
- [12] XI Jianchao, ZHAO Meifeng, WANG Kai, et al. Land use evolution of growth tourism town from 1986 to 2010: A case study of Sanpo Town in Yesanpo tourism attraction in Hebei Province[J]. Geographical Research, 2013, 32(1): 11-19.
- [13] CHIESURA A. The role of urban parks for the sustainable city[J]. Landscape and Urban Planning, 2004, (68): 129-138.
- [14] LYU Jie, CHEN Dongtian. Research progress of tourism oriented land development[J]. Mosaic, 2015, (6): 214-223.
- [15] FAN Qiang, YANG Jun, WU Nan, et al. Landscape patterns changes and dynamic simulation of coastal tourism town: A case study of Dalian Jinshitan national tourist holiday resort[J]. Scientia Geographica Sinica, 2013, 33(12): 1467-1475.

- [16] WANG Jian. Study on the problems of land use and its countermeasures around China' s world heritage sites[J]. China Economist, 2005, (2): 12-13.
- [17] SALVATORE R, CHIODO E, FANTINI A. Tourism transition in peripheral rural areas: Theories, issues and strategies[J]. Annals of Tourism Research, 2018, 68: 41-51.
- [18] CHEUNG D M, TANG B S. Social order, leisure, or tourist attraction? The changing planning missions for waterfront space in Hong Kong[J]. Habitat International, 2015, 47: 231-240.
- [19] PORTUGAL I B, ROCHA J, FERREIRA C C. Exploring the impacts of future tourism development on land use/cover changes[J]. Applied Geography, 2016, 77: 82-91.
- [20] MAO X Y, MENG J J, WANG Q. Modeling the effects of tourism and land regulation on land use change in tourist regions: A case study of the Lijiang River Basin in Guilin, China[J]. Land Use Policy, 2014, 41: 368-377.
- [21] CHEN Zhigang, BAO Jigang. The spatial morphological evolution of RBD and its determining mechanism in a typical scenic tourist city: The case study of Yangshuo County[J]. Geographical Research, 2012, 31(7): 1339-1351.
- [22] TAO Wei, HUANG Rongqing. Urban recreation business district and its relative factors: A case study of Guangzhou[J]. Human Geography, 2006, (3): 10-13.
- [23] LIANG Feng, LI Qianguo, SHI Peiji, et al. Evolution characteristics and driving factors of urban functional land in Zhangye City, the Hexi Corridors northwest China[J]. Arid Land Geography, 2019, 42(2): 414-422.
- [24] WANG Shaohua, LIANG Liuke. Mechanisms and spatial pattern changes of land use of world heritage tourist attractions in the perspective of tourism agglomeration: A case of Longmen Grottoes, Luoyang[J]. Economic Geography, 2015, 35(12): 216-224.
- [25] XU H G, HUANG X Y, ZHANG Q F. Tourism development and local borders in ancient villages in China[J]. Journal of Destination Marketing & Management, 2016, 58: 59-74.
- [26] LIU J, WANG J, WANG S H, et al. Analysis and simulation of the spatiotemporal evolution pattern of tourism lands at the natural world heritage site Jiuzhaigou, China[J]. Habitat International, 2018, 79: 74-88.
- [27] CAO Wenbin, LU Lin. Research on tourism development of ancient architecture based on protection first in China[J]. Resource Development & Market, 2006, 22(2): 188-191.
- [28] HU Weixia, LIU Jiaming, LI Ming, et al. Exploration of substitute industry for Shanxi' s coal economy: On the path of key scenic spots propelling regional economic development[J]. China Population, Resources and Environment, 2016, 26(4): 168-176.

- [29] ZHANG Jiasheng. Implementation of the project to build a well known brand of the Royal Prime Minister Palace[J]. Agricultural Products Processing (Innovation), 2011, (12): 26-27.
- [30] LU Xueliang, WANG Guoliang, HU Weixia, et al. Spatial distribution characteristics and influencing factors of residential scenic spots: Case of courtyard scenic spots in Shanxi Province[J]. Arid Land Geography, 2019, 42(1): 206-214.
- [31] YIN Yan, ZHOU Yingheng. Agricultural tourism layout in Jiangsu Province[J]. Resources Science, 2012, 34(12): 2409-2417.
- [32] ZHU Yiting, XIONG Heigang, BAI Yang, et al. Spatial and temporal changes and driving mechanism of county scale tourism in frontier tourism destinations[J]. Arid Land Geography, 2019, 42(2): 392-403.
- [33] LIU Chuanxi, TANG Daijian, CHANG Junjie. Research on space time evolution and mechanism of the rural tourism industrial aggregation in Hangzhou city: Based on the perspective of social capital[J]. Issues in Agricultural Economy, 2015, 36(6): 35-43.

Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv –Machine translation. Verify with original.