

J. Resour. Ecol. 2020 11(6): 633–644
DOI: 10.5814/j.issn.1674-764x.2020.06.011
www.jorae.cn

Space Changes in the Rural Tourism Area of Mufu Town, Hubei Province, China

TAO Hui¹, GAO Jing², CHEN Kaiqiang^{3,*}

1. School of Management, Minzu University of China, Beijing 100081, China;
2. College of Architecture & Urban Planning, Beijing University of Technology, Beijing 100124, China;
3. School of Management and Economics, Beijing Institute of Technology, Beijing 100081, China

Abstract: In a society dominated by tourism consumption, space changes occurring in rural areas can generally reflect their social changes. On the theoretical basis of flow, regeneration and adaptation of rural tourism space, this paper originally and creatively proposes that the spatial elements in a rural tourist area can be classified into three categories: Attractions (A), Towns (T) and Villages (V). By analyzing the spatial transformation characteristics of A, T and V, five types of rural spatial transition modes are found, the types of heritage, theme park, those serving as scenic spots, leisure industrial clusters and ecotourism areas. These different classes emerge due to their geographical differentiation. They show the same spatial evolution trend: The Attractions are distributed throughout the whole area and characterized by diversification; supporting services facilities gather in the Towns; and the Villages are landscape images. In this area the traditional rural benefit trends toward that of compound development. Mufu Town, Hubei province, is taken as a study case, and the changing characteristics of A, T and V from 2006 to 2016 are described. Problems in the process of establishing the new spatial order are considered. In order to realize the synergy between production space, living space and ecological space, the interactive development between Attractions, Towns and Villages is recommended. The perspective of Attraction-Town-Village (ATV) can lead to a better understanding of the situation of tourism space in rural areas and provide directions for thinking about the reconstruction path for the modernization of traditional societies.

Key words: rural tourism; space change; attraction; town; village; China

1 Introduction

Fei Xiaotong's classic description of the rural society (Fei, 2015), regarding spatial changes and reflections of rural tourism destinations, shows the imagination of the traditional Chinese villages. Since the end of 1970s, China's rural areas have seen significant changes resulting from the land policies and the rapid development of the social economy. Rural space changes are closely related to various social relationships. The spatial evolution of traditional villages, including growth, expansion, shrinkage and disappearance, reflects their dependence on the agricultural

economy (farmland) (Xi et al., 2015). The 1990s witnessed a rapid rural non-agricultural trend around the world. After the entrance of the handicraft, retailing, culture and tourism industries, production space in rural areas gradually transformed into consumption space. Therefore, the structure of the rural population varied considerably. Local villagers, owners of the second homes, tourists, managers and other new entrants contributed to the movement of the population, and thus social relationships as well as landscape images experienced dramatic changes. Thus, rural areas have evolved into complex multi-subject, multifunctional and

Received: 2020-04-16 Accepted: 2020-07-02

Foundation: The National Natural Science Foundation of China (41901180); The National Social Science Foundation of China (17ZDA165).

First author: TAO Hui, E-mail: taohui@muc.edu.cn

*Corresponding author: CHEN Kaiqiang, E-mail: kyle2833@163.com

Citation: TAO Hui, GAO Jing, CHEN Kaiqiang. 2020. Space Changes in the Rural Tourism Area of Mufu Town, Hubei Province, China. *Journal of Resources and Ecology*, 11(6): 633–644.

multi-dimensional spaces.

Rural tourism has undoubtedly strengthened the exogenous driving forces. Last year, Hubei Provincial People's Government decided to create 5000 model villages in the next five years and renovate 4000 administrative villages in order to comprehensively improve the living environment in rural areas. Driven by modern tourism, more villages are making efforts to construct the beautiful countryside. During the period of space reallocation in rural areas, large-scale tourist attractions (scenic spots) and tourism towns (or tourism distribution centres) have been created. The boundaries between the original villages and the new-born space are often blurred, which leads to intricate interactions. Many typical consuming landscapes have developed in the rural environment, dividing the original space into different parts like a mosaic. In these cases, the integrity and authenticity of the villages are likely to be impaired. In addition, blindly expanding the construction land damages the ecological environment. At the same time, social problems arise, such as consumption alienation, separation of traditional and modern lifestyles, and conflicts of interest. Rural ecological security has triggered the exploration of how to coordinate rural space, and consequently the Rural Revitalization Strategy of the Chinese government is undoubtedly a significant measure to address these problems in rural areas (Chen and Shen, 1999; Cao, 2005; Chen et al., 2008).

Rural tourism has been a hot research field for scholars at home and abroad in the past decade. Most studies focus on the participation of community residents (Hoggaart and Paniagua, 2001), rural industry transformation (Long and Liu, 2016) or the feasible methods of cultural renaissance in traditional villages (Kiernan, 2013). Some scholars use specific cases to explore changes of the rural landscapes in the transformation process of modernizing the villages, such as rural communities and tourism (Ebenezer, 2000), farming and exhibitions (Lv and Lin, 2017), festivals and cultural innovation (Ai and Ma, 2004), or tourism and migration (He et al., 2014).

In the middle and late 20th century, western sociological theories became mainstream and aroused a new wave of the so-called 'Space Turn' studies. Lefebvre is the most representative among them (Henri, 1991). Affected by the theory of spatial production, a number of Chinese scholars became active in this area. For nearly two decades, they have conducted deep studies on the aspects of humanistic tendencies (Chen et al., 2018), such as space and society (Sun, 2020), space and power (Liu et al., 2019), and cultural space and locality (Zhou et al., 2019). They have preferred to study spatial structures at the broad or mesoscale scales. Their achievements broke through the limitations of geographic information technology and provided a new perspective for understanding changes of traditional settlements. Therefore, studies of the rural societies have entered the 'most exciting period'. The rural society is no longer attached to urban de-

velopment, but revitalized as a space carrier by continuous construction, innovation, and reconstruction (Long and Tu, 2018).

Against the background of studies on urban-rural relations, however, there are some deficiencies. Firstly, traditional studies take cities or villages as independent units. They ignore the incorporated space born by the interplay between the cities and villages. Secondly, in the microcosmic view there is a lack of studies on the flow, adaptation and reproduction of rural tourism space, especially those with a focus on changes of the three kinds of elements: Attractions, Towns and Villages. For a long time, research has tended to focus only on one of them, which means that the other significant elements were ignored. Some problems followed since rural tourism develops rapidly on account of being supported by the national strategies. Thus, the new-born tourism space in rural areas, extending in the right direction, will play a more effective role in production and service functions. Coordinated development of cities and villages should be considered, and a habitable environment should be created. These are the keys to promoting the urbanization development of rural tourism.

Here, the important spatial factors in the process of tourism urbanization, scenic spots, tourist towns (communities) and rural environment are considered. This study chooses Mufu Town in Enshi City as a study case to discuss and verify its new spatial features from the perspective of the small-scale space: spatial relations and functions of A, T and V; the changing laws of rural space; and a reflection of locality based on the perspective of the synergy of spatial elements. It also provides similar rural tourism destinations that are undergoing space changes with a theoretical basis for managing comprehensive factors and reshaping the new spatial order and landscape patterns in rural areas.

2 Literature review

2.1 Locality and order: The perspective of space

The Spatial Turn of contemporary sociological theories provides a new perspective for understanding the changes and the traditional order of villages (He, 2007). Space is no longer regarded as a concept in the physical sense, but rather as one of social relations including locality, power, symbols, emotional experiences and so on. From the perspective of materialism, David Harvey thought deeply about how space, place, and environment intervene in daily-life practice (Harvey, 1985). Tuan (2006) focused on the core proposition of human-land relations and discussed the status of human life in terms of locality, space and survival experience. In the meantime, postmodernism, which advocates the differences and liquidity, became increasingly popular, and it has been widely used to explore and study the structures, networks, and connections of the rural composite space (Galani-Moutafi, 2013; Ren et al., 2015; Christopher et al., 2017; Jiang et al., 2017).

All rural renewal aims to reveal the social order. Villages have both geographical and consanguineous characteristics. Fei Xiaotong defined the gap pattern from the perspective of blood relationships, showing that the rural society is not a collection of individuals. From the perspective of social space, villages are not a spatial form of homogenization, but they have obvious centrality (Fei, 2016). Foucault proposed the concept of heterotopia and explored the interaction between space, order, and power in modern society, namely the authoritative structures in space. His exploration shows the interaction between space, order, and rights, which differs from the previous concept of space (Fig. 1). Changes in the spatial transformation of the countryside are observed through more multidimensional thinking.

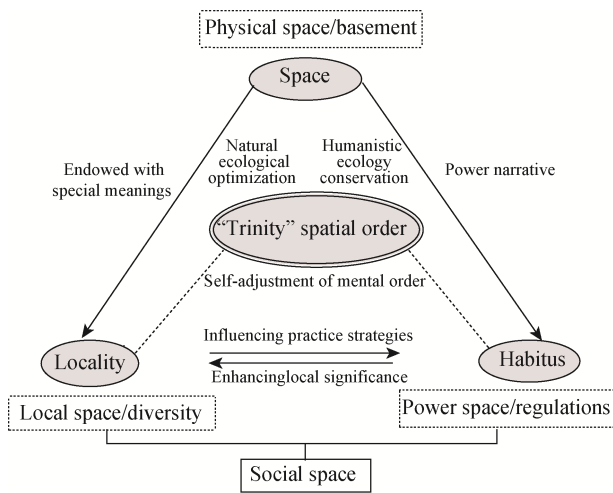


Fig. 1 Spatial turn and the social order research mechanism

2.2 Evolution of the tourism destination system

The evolution of the tourism destination system has always been an important research field of tourism geography. Traditional theories of tourism destination system evolution mainly analyze the changes of certain tourism elements, represented by Butler's life cycle model theory which divides the evolutionary stages of a tourism destination according to the changes in tourist numbers. Based on this theory, many scholars have empirically studied the evolutionary characteristics of different tourism destinations, and the concepts and quantitative methods of the tourism life cycle theory.

As studies on the tourism system have progressed, scholars' attention to the development of tourism destinations has gradually extended to scenic spots, service facilities, and transportation elements. The traditional studies of a single element cannot describe the comprehensive changes in the tourism system. Some scholars use either the general system theory, the dissipative structure theory or the system dynamics theory to study tourism systems. They explain the evolutionary process and mechanisms of tourism destina-

tions from different aspects of the system, and explore the characteristics of the tourism destination system such as integrity, relatedness, dynamics and non-equilibrium. However, the interactions between the elements in the system and the theoretical models of the internal mechanisms are seldom reported. In particular, discussions on multilateral relations of the spatial element system are scarce. The tourist area is regarded as a single spatial element without considering the complex ecosystem of space.

Scenic areas, villages and small towns, in a traditional sense, need to be explored in the rural tourism destination system. They are the new spatial elements of modern industrialization development under the influence of urbanization. Multi-composite spatial agglomeration and spatial structures have become new fields in the studies of rural tourism destinations.

2.3 Liquidity, adaptation, and sustainable development

Bauman believes that liquidity is a notable feature of a modern society (Nicholas, 2001). The studies of inheritance, renaissance, innovation of tradition and the birth of culture have become important fields in anthropology and social science. Hobsbawm re-evaluated the renaissance and creation of the national culture, which has the essential reference value for our analysis (Hobsbawm and Kertzer, 1992). As the basic theory for the development of national cultural tourism resources, cultural reconstruction and adaptation have attracted widespread attention from scholars.

Foreign scholars represented by Erik and Cahir have shown that culture is dynamic and variable (Erik, 1972; Cahir and Clark, 2010). The innovation of traditional culture is an important approach to promote local economic development, and it will not lead to the disappearance of traditional culture. In contrast, traditional culture will be popularized from other aspects. Research on cultural adaptation started late in China. In addition to the dynamic changes and motivational mechanisms of culture, these studies focus on how to protect traditional culture through cultural reconstruction. In addition, Chinese scholars have found that other countries are also facing the same situation: the destruction and rapid disappearance of traditional culture. Hence, they argue that the changes in cultural ecosystems will ultimately affect human creativity and social progress.

Realizing the negative impacts on natural and humanistic ecosystems in rural areas due to the entrance of tourism, in the 1970s some scholars began to study sustainable development in rural areas. For example, Farrel et al. (2004) argue that tourism is a complex and dynamic social ecosystem. Since then, a variety of other studies on the sustainable development of tourism ecosystems have been performed. After entering the new era, scholars now mainly study the processes of spatial evolution, ecological security, ecotourism (Lu and Chen, 2020), environmental carrying capacity, community participation (Gao and Wu, 2017), sustainable

development modes (Wang et al., 2016), etc., and emphasize the sustainable developmental strategies of rural modernization adaptability.

3 The theoretical perspective: Tourism spatial synergy from the Attraction-Town-Village (ATV) perspective

3.1 Connotation of Attraction-Town-Village(ATV)

Inspired by the ROS (Recreation Opportunity Spectrum) theory, this study puts forward that rural tourism space can be divided into three categories of elements, Attractions (A), Towns (T) and Villages (V). Based on the practice of space innovation by introducing tourism into rural areas, the alienation and correlations of spatial carriers in the process of tourism urbanization are investigated. The coordination of tourism space demands both the sustainable development

of tourism and the reasonable transformation of spatial elements. In a sense, A, T and V respectively represent the ecology space, the production space and the living space in a rural tourism destination (Tao et al., 2019). The complex space results from industrial integration (Tao et al., 2018). The theoretical innovation point of this research is a shifting of the focus from traditional tourist destinations to the new tourism space. Presently in China, tourism development is a direction of rural (or ancient town) transformation, which has a bright prospect and great research value.

3.2 Spatial relations between Attractions, Towns and Villages

ATV space in the tourist destination system is an organic entity. By reasonable spatial arrangement, positive interactions between A, T and V will realize the maximum benefits (Fig. 2).

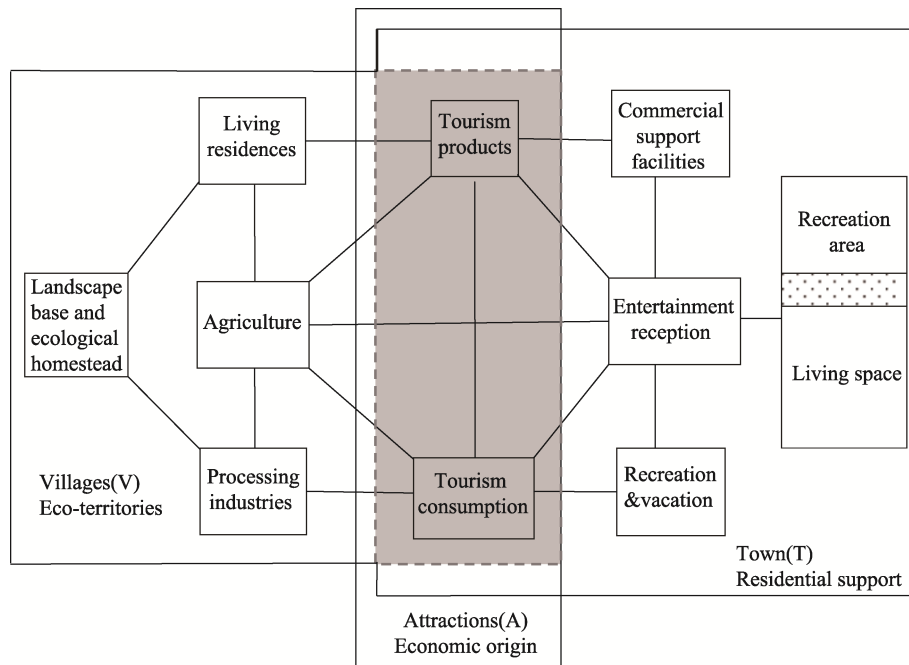


Fig. 2 The Spatial functions of ATV

A and T show synergetic effects toward each other. For example, if A is a nature reserve with poor environmental stability and weak anti-disturbance capacity, it has to rely on T to achieve the highly-effective utilization of resources by boosting the tourism industries. The quantity and quality of A directly impact the layout and functions of T. A and V complement with each other. As an essential element of A, the rural environment can enhance the attraction of the tourism destination. Although V and T are different types, their spatial integration is reflected in the fact that the rural character affects the individualized construction of locality.

3.3 Changes in the Attraction-Town-Village (ATV) space

Space is constructed, deconstructed, and reconstructed over

and over again under the influence of various forces, consequently producing unprecedented new features. As tourism enters the countryside, rural spaces with different initial conditions undergo distinct kinds of changing patterns (Table 1).

The five types of rural spatial changes above share the common characteristics of spatial changes under the influence of tourism:

(1) A is diverse and tends to be global. With the transformation and upgrading of tourism industries, the traditional tourism resources are among the sufficient conditions for tourism urbanization. Tourism resources have been gradually developing into all-for-one tourism space. Emerging resources include not only traditional tourism attractions, but also the beautiful environment, various renewable

Table 1 Rural spatial changes from the perspectives of interaction with attractions, towns and villages

Serial number	Mode	
	Spatial transition characteristics	Spatial combination evolution
1	Heritage	<p>The town is both a commercial service area and a core attraction. Along with the development of tourism, the old town expands into a new town with new living functions. Influenced by the industrial economy, the surrounding rural settlements evolve. The surrounding rural landscapes extend outward. The original villages are constantly absorbed by the town</p>
2	Theme park	<p>There is no scenic spot at first. But then a large-scale cultural tourism scenic spot is created, which develops from one or several specific theme parks at the early development stage. Theme tourist attractions and theme real estate are developed jointly at the middle and later stages. The area where there is a scenic spot develops into a town, while concentrated villages merge into a new town</p>
3	Services for scenic spots	<p>At this stage, urban leisure space continuously extends to the periphery. In rural areas with abundant tourism factors (location, environment, resources, etc.), new administrative jurisdiction systems are gradually formed, thus changing the ways land is used. With rural settlements becoming fewer, new towns form and rural landscape lands are protected</p>
4	Leisure industry clusters	<p>The high-grade scenic spots lead to expansion of the service space. With the upgrading of tourism industries, village service points no longer meet the demands of the markets. Scattered villages are distributed not far away from the scenic spots. Owing to the existence of the scenic spots, a characteristic tourist town forms in peripheral rural areas</p>
5	Ecotourism areas	<p>Scenic spots and the town are normally located in the urban fringe. Owing to the development of industries, rural settlements have been relocated several times, forming a new tourist town. The tourism attraction continuously expands with the development of the towns. Then leisure and holiday industries gather in the new towns, and the original villages are merged</p>

Note: ● represents the original village or settlement; ○ represents the original village or settlement in the town after the changes; ● represents the overall environment or rural background; ○ represents the expansion direction of the countryside; ○ represents the expanded part of the countryside; ■ represents the attraction; ○ represents the expansion direction of the attraction; ■ represents the town; ○ represents the expansion direction of the town

tourism resources, commercial service facilities and landscape images.

(2) T becomes service hubs which promote the urbanization of rural settlements. As the tourist towns of supporting service facilities for the tourists and scenic spots, tourist towns have become a necessary condition for the development of rural tourism urbanization. It is impossible to promote the development of rural urbanization without industry clusters.

(3) V presents landscape images. The traditional rural benefits are many. Even if there is no unique high-end attraction, the fantastic rural images can become a kind of special tourism resource in the era of leisure and vacation. The picturesque environment in rural areas is the basis of tourism development for towns.

Table 1 shows that because of geographic differences the spatial changes which arise in Chinese rural areas after the entrance of tourism fall into five types: heritage, theme park, services for scenic sports, leisure industry clusters and ecotourism areas. Among them, services for scenic spots is the most common type. Since Chinese tourism develops with large-scale group tours and sightseeing tours, growing traditional scenic spots in the rural areas promotes the change of villages into service type towns, such as the typical case of this research object, Mufu town.

4 Materials and methods

4.1 Study area

Mufu Town, the center of Enshi Grand Canyon scenic area, is located in the northwest of Enshi City, approximately 61 kilometers from the downtown. The Government Office was established on December 10, 2008 and it has cooperated with Hubei Culture & Tourism Investment Company Limited to jointly develop and operate the Grand Canyon Scenic Spot in Enshi. It also has jurisdiction over five villages and one neighborhood committee, with 5049 households, 26100 people, and a land area of 180 km² (the area based on remote sensing data in this study is 156 km²). The average altitude is 1000 meters. This area has a mild climate, abundant rainfall, and a forest coverage rate of 70%. There are abundant resources in the town, especially tourism resources and mineral resources. The Enshi Grand Canyon has magnificent scenery, with Qingjiang River and Yunlong River crossing through the whole territory. There are various agricultural products, such as high-quality tea, rice, and medicinal materials. The town-constructed area of Mufu is about 79 ha (by the end of 2016).

In 2009, Yichang–Wanzhou Railway and Shanghai–Chengdu Railway were open to traffic. In 2015, the Enshi Grand Canyon was rated as the national 5A grade scenic spot for its ancient geological and cultural value. Conse-

quently, the tourism supporting industries in Mufu Town developed rapidly and the system whereby all government departments participate in tourism development formed at that time. With selenium-rich resources as the theme of publicity, farmers were guided by the government to produce local characteristic selenium products, such as tea and grapes. Farmers' incomes increased significantly, and by the end of 2016, the per capita income reached 9800 yuan. At the same time, the number of tourism facilities increased. By the measures of 'one household, one product', the economic status of Mufu Town has been definitely lifted. In 2016, Mufu Town was rated as one of the most popular tourism destination towns in Hubei Province.

4.2 Methods of data processing

This study uses qualitative research methods, such as the non-participatory observation method and the in-depth interview method. The observations and comparisons were analyzed by villagers and staff. In order to achieve the research objective, the author carried out investigations several times in Mufu from 2009 to 2016, and kept in touch with the interviewees constantly by telephone and mail to update the data.

This study analyzes and classifies the data of satellite remote sensing images of Mufu Town by ArcGIS 10.1 software. The analysis of the satellite image data comes from Landsat 8 OLI. The spatial resolution of the visible light band is 30 m while the spatial resolution of the panchromatic band is 15 m. Due to the influences of the local climate and cloud layers, obtaining absolute high-definition images is difficult. The original data for land classification in this area were obtained via remote sensing image fusion (MSIF) and image mosaic. The spatial resolution of the remote sensing data fusion is 15 m.

5 Rural changes from the perspective of ATV space

5.1 Changes of Attractions (A)

An overlap arises between space changes in the scenic spots and towns. The space changes of attractions reveal the occupation of external resources. They keep expanding toward the consumption space in towns, and then numerous related attractions are laid out across the whole area. As a national 5A grade scenic spot, the Enshi Grand Canyon in Mufu has gradually expanded from the original core scenic spot of Qixingzhai to the area of Chaodongyan and Luyuanping since it was opened to the public in 2008. The original tourist area was only 35.35 km². However, by the end of 2016, the area was 368 km² and it had become a comprehensive tourist attraction with diverse activities. Fourteen administrative villages and hundreds of settlements are located within it. The recently developed scenic spot of Daughter Lake is much more attractive.

Of course, the expansion of landscape land will change

the original relations of land use, which is a special concern of rural space reconstruction. *The England Farmer or Geographical Dictionary*, published in 1797, defines the space construction order of the Middle Ages as concentric land evolution. Nowadays, with the arrival of the consumption economy, a new land classification (a more detailed and professional classification system) has been developed, and this changing discipline should be redefined.

The land use changes from 2006 to 2016 in Mufu are analysed via Landsat 8 Oli, and the images are geometrically modified by quadratic polynomial and bilinear interpolation. Moreover, radiation correction for the images was performed based on the image metadata. The adjusted image data were then classified through the index method, multi-scale segmentation technology, and artificial interpretation. According to the Chinese national standard, Classification of Land Use Status (GB/T21010-2007), as well as the actual situation in the locality, land in the study area was divided into five categories: arable, woodland, construction land, lakes and traffic land (roads). After pre-processing, the ENVI software was used to select regions of each land type of concern in the image as the samples. Whether the degree of separation in each category met the accuracy requirements was judged. The distribution, area, and proportion of each type were obtained by the maximum likelihood method. The results were modified with micro-correction according to the actual distribution, thus improving the classification accuracy. Finally, the images of land use changes were mapped with ArcGIS software (Fig. 3).

Based on the data analysis and comparison of the classified land use over the last decade (Table 2), the construction land was found to have changed the most. Its area increased by 300%, from 3.522 km² in 2006 to 10.398 km² in 2014.

In the light of the survey statistics, the alteration of spatial land relations is affected by two aspects. Firstly, under the influence of economic radiation and expansion of scenic spots in this area, land relations in space have changed. The emerging tourism space has gradually extended into the present agricultural space, forming a new tourism industry cluster in the spatial distribution. Secondly, the ownership and use rights of collective land have been transformed. Since the ecological resources have been plundered by developers, the residential land became commercial land.

The former is the obscuring of the scenic spot boundary caused by market behaviour, while the latter is the damage to the rural ecological environment because of the expansion of urbanization. The statistics show that the area for which the use purposes of the collective land have changed in Enshi Grand Canyon is about 338634 km². This area is now mainly used for domestic tourism, as well as commercial and entertainment facilities.

5.2 Changes of Towns (T)

As new-born entities in rural areas, the scenic spots and the

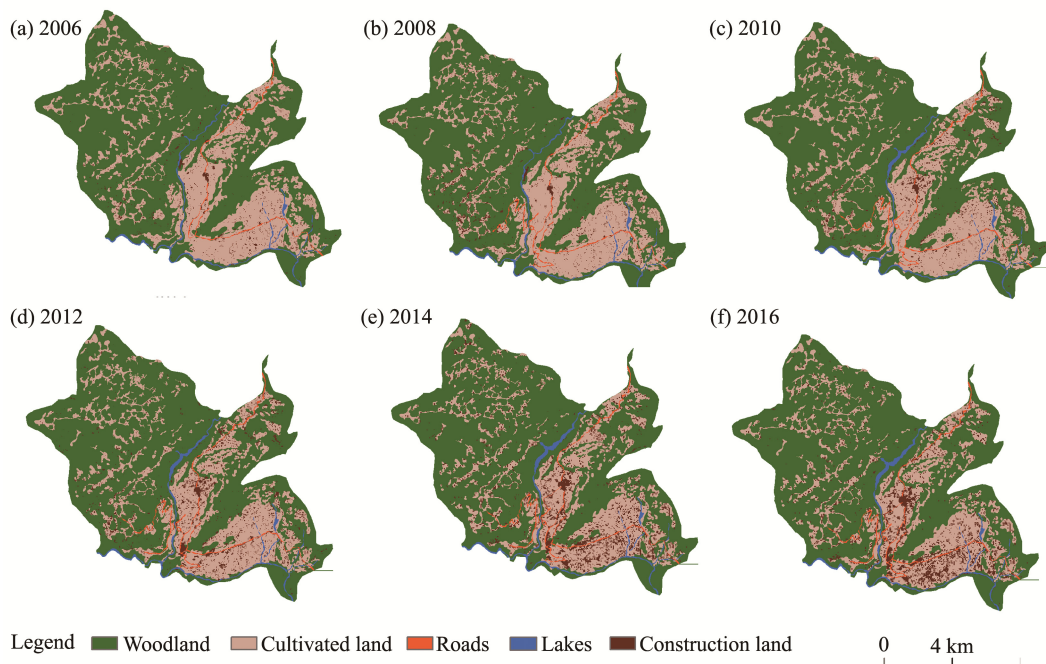


Fig. 3 The diagrams comparing land use changes in Mufu (2006–2016)

Table 2 The statistics of land use changes in Mufu region (2006–2016)

Area (km ²)	Year					
	2006	2008	2010	2012	2014	2016
Woodland	104.90	103.67	102.70	102.65	102.57	102.71
Cultivated land	45.65	44.19	44.19	41.86	38.65	38.19
Roads	1.17	1.74	1.96	1.96	2.01	2.05
Lakes	2.35	2.34	2.67	2.67	2.87	2.87
Construction land	3.25	4.56	4.98	7.36	10.40	10.68
Total	156.50	156.50	156.50	156.50	156.50	156.50

small towns saw changes which were less complex than the changes in the villages. Residents in the original villages moved into the town. As a result, an increasing number of rural people gathered there. At the same time, the original fair became a large trade centre. The robust economy and trade, as well as tourism industries, drove local population

mobility. The construction of various forms of infrastructure was pushed by the local government, which serves both local residents and outsiders. Owing to the rapid development of attractions, a large number of start-up farms arose in the town and on both sides of the road leading to the attractions. Their appearance promotes the availability of comprehensive services. Currently, the town has developed into a state of high urbanization, and the whole development process can be summarized as a spatial growth sequence of ‘attraction nuclear + agglomerate nuclear + industrial extension’. The reconstructed town is not only a service centre near the scenic spot, the Grand Canyon Scenic Area, but it is also a supplement to the landscape elements in this area (Photo 1). In 2014, the town was constructed and expanded on the basis of the original ancient town, and it has since become a characteristic town with stilted buildings. Therefore, it is rated as a Famous Town in Hubei Province and added to the first list.



(a) 2009



(b) 2016

Photo 1 The comparison of landscape transformation of Mufu Town (2009–2016)

5.3 The perspective of Villages (V)

Along with the development of the leisure tourism industries in China, one manifestation of the changes of rural space is that the economic features of A and T became more diversified. Moreover, the traditional living space of the villages was occupied, transformed and reconstructed to conform to the requirements of the developing tourism industries. As a result, it underwent three levels of evolution: material level, social level and cultural level.

5.3.1 Material level

The material space structures of the villages with various attributes experienced different stages of development, owing to the unevenness of the development basis among them. Their common feature is the expansion of the material space, and the functional service space was transformed from one of decentralization to centralization. Braudel discussed the rela-

tive mobility of the villages (Eva, 2000). He pointed out that everything, such as furniture, people, animals, and tools, has moved out of the abandoned villages, and the forms of the villages have been changing constantly, which results from the development, expansion, contraction, and migration of the villages. Under the combined influence of internal and external factors, the changing forms present three types of villages: towns of overall special changes; towns of phased evolution; and villages of internal space changes. The spatial changes of Ma'anlong (an original village in Mufu) are consistent with the first of these three types (Fig. 4). In 2010, Mufu Enshi Ma'anlong Real Estate Development Co., Ltd. entered this area. As a result, the village was occupied by the property developer, and eventually became a man-made tourist village called Nverzhai, near the Grand Canyon (Photo 2).

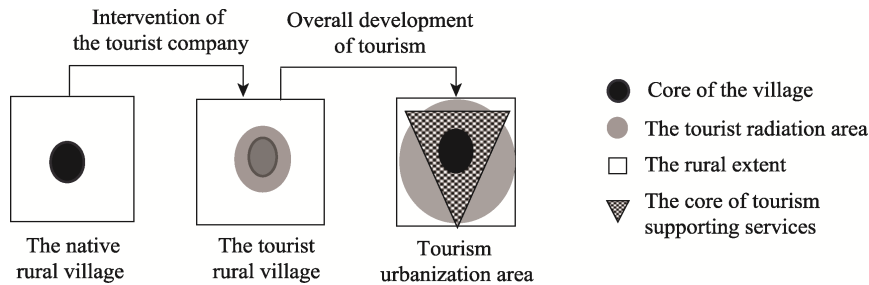


Fig. 4 The schematic of the village spatial changes (Type 1)



Photo 2 The spatial changes of Ma'anlong Village in Mufu (Ma'anlong 2012–Nverzhai 2015)

The pattern of overall reconstruction is mainly aimed at the villages with high tourism development value or those near large-scale scenic attractions. While the entrance of the tourism development company pushed the village to enter into urbanization rapidly, such large-scale development of the corporate operation is likely to lead to over-urbanization or hollow villages.

5.3.2 Social level

The changes of the village's social boundary are reflected in the changes of resident status, the transformation of the

dominant economies, and the transformation of cultural images. Basically, the social space is characterized by the renewal of a series of social structures triggered by the changes in the material space (John, 2010).

(1) Inhabitation status

First, the village evolved into a small town. Under the intervention of governments or developers, a new residential area emerged. Owing to the expansion of the production space, the resettlement of the original resident area occurred (Photo 3). In the meantime, houses owned by outsiders or

foreign operators appeared. The vocational differentiation and the changes in the status of residents inevitably followed.

(2) Status of industries

With the rapid development of tourism, the original economic model of the rural primary industry underwent fundamental changes. The service economy gradually formed and the tertiary industry developed, as well as the

areas along the traffic line (Table 3). Landscape plants were planted on the previous farmland, which met the needs of production and development of the leisure economy. Travel service facilities gathered in this space where there are both native villagers and tourists. The commercial space serving the natives shifted to the space serving the tourists.



(a) 2010



(b) 2015

Photo 3 Pictures showing the resident changes (Xianghong's House, 2010–2015)

Table 3 The statistics of rural industrial changes in Mufu

Time	Characteristic industry base	Tourism service facilities
2012	5000 mu of tea gardens, 1000 mu of golden pears, 1000 mu of small peppers, 1600 mu of small fruit, 3000 of tribute base, 2000 mu of medicinal materials base, 4430 mu of vegetables	There were 35 farms and 25 farmhouse hotels. The rural hotel industry realized revenue of 1.5 million yuan
2013	More than 10300 mu of tea, grapes, peonies, rape, marigold, and lavender	There were 32 farms and 3 branded farmhouse hotels. An operator's annual average income is about 50000 yuan
2014	20000 mu of tea gardens, golden pears, small peppers, peach trees, glutinous rice base, and potatoes; approximately 27400 mu of various anti-season vegetables. There were 19 professional farmer cooperatives	There were 35 farms. The rural hotel industry realized revenue of 3.5 million yuan
2015	20300 mu of tea, grapes, peonies, lavender and other varieties. More than 5000 farmers participated in the project of industrial adjustment	There were 35 farms, 14 of which had upgraded to high-grade homes offering 350 employment positions. The rural hotel industry realized revenue of 3.8 million yuan. A total of 203 shops were built in the Grand Canyon Scenic Area, all of which were leased to the land-requisitioned farmers in the scenic spot development
2016	Another three new farmers' cooperatives have been established, yielding a total number of 22	There are more than 150 farms, 44 of which are star-rated farms. There are 28 branded farmhouse hotels and about 2000 employees in the whole tourism industry. The average annual income of an operator was nearly 130000 yuan

Note: The data were collected from the author's field survey and field statistics from the Mufu Government Office; 1 ha=15 mu.

5.3.3 Cultural images

On account of lifestyle changes, the cultural space of the traditional villages was reduced. Conversely, the new-born cultural space for tourists and natives that satisfies the needs of leisure and entertainment arose, such as commemorative cultural corridors, memorial halls, theatres and so on. Influenced by tourism activities, local villagers put more energy into productive economic activities, such as selling souvenirs or local goods. As a result, they spent less time on leisure activities (Box 1). In the process of changes affected by tourism, the cultural space in rural areas began to change. The distinctive local culture appeared in the form of symbols showing the value of human existence. In *Anecdote of the Jar*, Wallace Stevens emphasizes that the jars (human activities) conquered the Tennessee mountain space. Human

activities are like jars which exist in the scenery, without interfering with nature, and have harmonious relations with the surroundings, so that this scene reflects a rustic flavour. From this perspective, the functional transformation of the public cultural space in the villages, the desire for beautiful landscapes and the adaptation to the cultural consumption made the villages eventually become pious communities and symbols of harmonization. On the one hand, the villages adapt to the cultural needs in an era of rapid urban-rural transformation. Therefore, a variety of cultural centres occur. On the other hand, places of cultural consumption comply with local traditions and customs, which makes the villages possess certain aesthetic features. Consequently, the power as well as the spirit of creating and transforming the landscapes matters a lot.

Box 1 The field notes

Xiaoxi Village is adjacent to the main road in Enshi Grand Canyon tourist scenic area. The first investigation in 2008 found that the village was in an undeveloped state, while it was semi-developed in 2013. Three years later the appearance of the buildings, spatial structures, traffic roads and even the identity of residents had changed substantially.

On August 20, 2016, the author arrived at the entrance to the village driving along the scenic road, and was surprised to see the dramatic changes. There was a two-story parking lot in the tourist service centre. The driveway along the bank of the creek extended from its upper reach to the lower reach. The surroundings of Mr. Hu's courtyard were full of tourist receptions on both sides of the road. At lunchtime, I entered a hotel with a specific restaurant and was given a warm reception by a female with a foreign accent. She introduced local food for us in detail. She had come from Henan and got married to a native. The restaurant run by her and her family brings substantial revenues in the peak season.

The changes of the villages, which give inhabitants a new identity that is closely linked to the value of the land, will not only affect the original environment, but also improve residents' lives and elevate their minds. Accordingly, in addition to focusing on the village layout, classified relocation and reconstruction, the way in which we view the rural world should also be emphasized. For foreign tourists, they should respect the local history, culture and social customs. Conversely, natives should not abandon excellent material and intangible culture in catering to the tourists. In particular, devastating tourism-related real estate projects tend to destroy the scattered and scarce resources of the villages. The undeveloped and high-value ecological resources are often forcibly occupied by property developers, causing the fragmentation of rural land and disordered space changes.

6 Reflection on space order: Interactions of development between Attractions (A), Towns (T) and Villages (V)

6.1 Introspection of space order

The development of tourism industries makes rural areas change. Space changes are the most evident. On the one hand, the compound characteristics are revealed through internal changes in villages, changes of land use patterns around them, as well as changes of their social structures and traditional living customs. On the other hand, attractions are widely distributed throughout the entire area. Green mountains and clear rivers, pastoral sceneries and harmonious relationships with neighbours are the ideal scene for living in hearts of Chinese urban white-collar residents. Compound characteristics of villages and attractions distributed throughout the whole area drive the mobility of China's rural population. Commercial facilities have to be constructed for the outsiders who have the double identities of producers and consumers, which promotes trade circulation and gathering. Since the originally centre-margin space

structures changed radically, central villages and traditional fairs had the chance to become tourism towns. However, in the development process with distinctive Chinese features attention should be paid to the fact that because tourism urbanization is occurring in the era of soaring property bubbles, changes in the Chinese countryside come with the plundering of land resources, irregular space occupation, a deficiency of scenic infrastructure and other consequences.

Tourism-related real estate projects have become one of the most prevalent types of land use in the latest round of urbanization. It typically uses the advantages of landscape resources to generate high demands for land resources and to deploy a large number of resorts and housing facilities in scenic spots. Developing the surrounding areas has become the preferred choice of developers. This kind of rude occupation of the landscapes causes great harm to the local ecological environment. Shifting the ownership rights of land to private enterprises causes the natives to lose their rights of land-use and makes their livelihoods more difficult. In addition, sustainable economic growth and prosperity for their descendants are threatened. Conflicting interests between local residents, developers, the governments and other groups gradually form. Because of these interventions of multiple stakeholders, traditional villages were plunged into the status of hollow villages, facing problems of heritage protection and the fading of local characteristics. Since the subjects in villages, the intangible cultural heritage and the modes of large-scale commercial production are all neglected, the local communities lose discourse power for the ownership and management rights of the villages.

6.2 Reconstruction of Spatial order: Interaction development between Attractions (A), Towns (T) and Villages (V)

In China, determining how to reconstruct the ideal space order is always a focus of attention. With the appearance of economic benefits from rural tourism, tourism promotes the construction of supporting facilities around towns and the frequent occurrence of commercial activities. This provides conditions that are advantageous for forming distinctive towns. The space adjacent to scenic spots expands, and eventually develops into agglomerating towns. The internal and external environments of traditional ancient towns, which are the landscape basis of locality, have the function of ecological conservation for the whole area.

As the strategy of order reconstruction of the rural tourism space, the development of interactions between attractions, towns and villages balances the activities of the subjects. One's development should not be attained at the expense of destroying any other's benefit. In the course of interactive development, the original rural space and the peripheral new-born space keep their own respective styles and orders. The protection of heritage resources is strengthened in the system constituted by industries, culture and ecology. In other

words, this process of space reconstruction is designed to reconstruct the production-living-ecological space. Traditional living space has the functions of recreation and living. Ecological space passively has the same functions. Because of this, a blending space gradually develops. The enclosure of landscape resources is prevented and the integrity of rural landscapes is protected. As the production space of entertainment, towns become the core areas of leisure industry clusters. Residents' living space moves towards more pleasant and multifunctional characteristics. Meanwhile, the aesthetic value of the villages improves. The course of spatial reconstruction is not only a process of the resources of Attractions (A) and Villages (V) changing into markets, but also a process of value realization of the Villages (V). It is the process of self-position and spatial regeneration as well. Interaction development between Attractions, Towns and Villages needs policy support and innovation. The profit distribution mechanisms for scenic spots, consisting of local residents, should be established.

7 Conclusions

Rural revitalization and the modernization of rural areas maintain the focus of the Chinese government at all times. The countryside is the broadest space for development, with great potential in the future. The changes of rural space structures are the processes by which the rural society is imagined, transformed and embodied. Revitalization of rural tourism complies with the current temporal development trend in China, which makes the villages full of energy. Based on the theories of flow, regeneration and adaptation of the rural tourism space, the spatial functional relations between Attractions (A), Villages (V) and Towns (T) are originally and creatively revealed in this research. The exploration of the spatial transformation characteristics of A, T and V, shows that there are five types of changing modes: heritage, theme parks, services for scenic spots, leisure industry clusters and ecotourism areas, on account of regional differences. But these five types show the same trends of spatial changes: A indicates the characteristics of diversification and distribution in the whole area; service facilities gather to T; and V shows the images of the landscapes. The traditional rural benefits trend toward compound development. This study takes a rural area in western China as the case study. In the context of social transition, the changing characteristics of the three categories over a decade are described. The analytical framework of A, T and V is constructed for the purpose of explaining the current situation of the rural tourism space and its future development trends. Problems arising in the process of establishing the new spatial order are considered deeply. The development of interactions between A, T and V is proposed in order to realize the synergy between the production space, the living space and the ecological space.

Admittedly, rural reform is a systematic project involving

many different aspects. In addition to considering the effective allocation of space resources, the focus should also be on market transformation and changes in social structures when problems and dilemmas arise in the process of rural modernization. This paper explores the rural space changes for arousing cultural self-consciousness and strengthening landscape rights. When modern elements are fused into traditional space development, some problems and dilemmas will inevitably arise. The inspiration for how to solve them can be gained from this research. In addition to the efficient allocation of population and resources in space, the understanding of spatial changes and problem-solving strategies also need to be considered deeply from the perspectives of market transformation and the building of state power (Zhou, 2020). It is especially important to review the realistic problems of rural space changes happening in the distinctive towns, the beautiful villages and rural resettlement communities, which are being caused by both policies and other outside factors. Having analyzed the changing trends, practice strategies and real conflicts of A, T and V, the reconstruction pathway for the modernization of traditional societies is conceived. Through rural space reconstruction, the unification of humanism, the spiritual home and the natural home can be achieved eventually.

References

- Ai D B, Ma X L. 2004. The formation and evolution of the rural social space in China. *Human Geography*, 19(5): 55–59. (in Chinese)
- Cahir D A, Clark L D. 2010. "An Edifying Spectacle": A history of "Tourist Corroborees" in Victoria, Australia, 1835–1870. *Tourism Management*, 31(3): 412–420.
- Cao H L. 2005. The village public space in the changes of rural society: An empirical study on the reconstruction of village order in the north of Yao Village. *China Rural Survey*, 6: 61–73. (in Chinese)
- Chen H Y, He L S, Li P, et al. 2018. Relationship of stakeholders in protected areas and tourism ecological compensation: A case study of Sanya Coral Reef National Nature Reserve in China. *Journal of Resources and Ecology*, 9(2): 164–173.
- Chen X H, Zhang X L, Ma Y J. 2008. Spatial transformation of rural areas in China under the background of rapid urbanization. *Journal of Nanjing Normal University (Natural Science Edition)*, 31(1): 125–129. (in Chinese)
- Chen Z B, Shen D Y. 1999. Reach strategy of town pours to the development of regional economy: Taking Hunan as a case. *Economic Geography*, 19(3): 24–30. (in Chinese)
- Christopher B B, Paul C, Bekele A S. 2017. The structural transformation of African agriculture and rural spaces: Introduction to a special section. *Agricultural Economics*, 48(S1): 5–10.
- Ebenezer H. 2000. Garden cities of tomorrow. Jing J Y (translated). Beijing: Beijing Commercial Press. (in Chinese)
- Erik C. 1972. Toward a sociology of international tourism. *Social Research*, 39(1): 164–82.
- Eva Kiss. 2000. Rural restructuring in Hungary in the period of socio-economic transition. *GeoJournal*, 51(3): 221–233.
- Farrell B H, Twining-Ward L. 2004. Reconceptualizing tourism. *Annals of*

- Tourism Research*, 32(2): 274–295.
- Fei X T. 2015. Earthbound China. Beijing: People's Publishing House press. (in Chinese)
- Fei X T. 2016. The path of urban and rural development in China. Shanghai: Shanghai People's Publishing House. (in Chinese)
- Galani-Moutafi V. 2013. Rural space (re)produced—Practices, performances and visions: A case study from an Aegean island. *Journal of Rural Studies*, 32: 103–13.
- Gao G, Wu B H. 2017. Revitalizing traditional villages through rural tourism: A case study of Yuanjia Village, Shaanxi Province, China. *Tourism Management*, 63: 223–233.
- Harvey D. 1985. The urbanization of capital. Washington: The Johns Hopkins University Press.
- He A L, Yang X J, Chen J, et al. 2014. Impact of rural tourism development on farmer's livelihoods: A case study of rural tourism destinations in northern slope of Qinling Mountains, China. *Economic Geography*, 34(12): 174–181. (in Chinese)
- He X S. 2007. Spatial turn in new urban sociology. *Journal of East China University of Science and Technology (Social Science Edition)*, 1: 1–5. (in Chinese)
- Henri L. 1991. The production of space. Oxford: Blackwell Ltd Press.
- Hobsbawm E J, Kertzer D J. 1992. Ethnicity and nationalism in Europe today. *Anthropology Today*, 8(1): 3–8.
- Hoggart K, Paniagua A. 2001. What rural restructuring. *Journal of Rural Studies*, 17(1): 41–62.
- Jiang W, Zhao J, Wu T, et al. 2017. A co-evolution model of planning space and self-built space for compact settlements in rural China. *Nexus Network Journal*, 19(2): 1–29.
- John R L. 2010. Uneven development: Nature, capital, and the production of space. Cambridge: Cambridge University Press.
- Kiernan K. 2013. The nature conservation, geotourism and poverty reduction nexus in developing countries: A case study from the Lao PDR. *Geoheritage*, 5(3): 207–225.
- Liu Q, Liu Q, LI G C. 2019. Power, capital and production of space: A case study of Huaqiangbei District, Shenzhen. *Urban Development Studies*, 26(10): 86–92. (in Chinese)
- Long H L, Liu Y S. 2016. Rural restructuring in China. *Journal of Rural Studies*, 47(B): 387–391.
- Long H L, Tu S S. 2018. Theoretical thinking of rural restructuring. *Progress in Geography*, 37(5): 581–590. (in Chinese)
- Lu X B, Chen X Y. 2020. Analysis of obstacles to sustainable development of ecotourism in nature reserves: A field investigation of three national nature reserves in Liaoning Province. *Journal of Resources and Ecology*, 11(1): 50–58.
- Lv Z Y, Lin G. 2017. Hybridity: Rethinking rurality. *Geographical Research*, 36(10): 1873–1885.
- Nicholas G. 2001. Zygmunt Bauman: Liquid modernity and beyond. *Acta Sociologica*, 44(3): 267–75.
- Ren Y, Liu Y, Long H, et al. 2015. Spatio-temporal characteristics of rural settlements and land use in the Bohai Rim of China. *Journal of Geographical Sciences*, 25(5): 559–72.
- Sun Q S. 2020. On Marx's theoretical form of “the production of space”. *Journal of Shanghai Normal University (Philosophy & Social Sciences Edition)*, 49(3): 36–46. (in Chinese)
- Tao H, Huang Z H, Ran F X. 2018. Rural tourism spatial reconstruction model from the perspective of ATV: A case study of Mufu Township, Hubei Province, China. *Sustainability*, 10(8). 2675. DOI: 10.3390/su10082675.
- Tao H, Ma G Q, Ran F X, et al. 2019. The classification and development model of traditional villages from H-I-S perspective: A case study of Handan. *Tourism Tribune*, 34(11): 82–95. (in Chinese)
- Wang X G, Xi J C, Yang D Y, et al. 2016. Spatial differentiation of rural touristization and its determinants in China: A geo-detector-based case study of Yesanpo Scenic Area. *Journal of Resources and Ecology*, 7(6): 464–471.
- Xi J C, Wang X G, Kong Q Q, et al. 2015. Spatial morphology evolution of rural settlements induced by tourism: A comparative study of three villages in Yesanpo Tourism Area, China. *Journal of Geographical Sciences*, 25(4): 497–511.
- Tuan Y F. 2006. Humanistic geography—A personal view. *Progress in Geography*, 25(2): 1–7. (in Chinese)
- Zhou S L. 2020. From imbalance to integration: Change of structure in rural area and its governance transformation. *Studies on Socialism with Chinese Characteristics*, (2): 53–62, 2. (in Chinese)
- Zhou S Y, Su X, Chen H M. 2019. Local knowledge and spatial governance: A case study of the governance of Dongshan town, Suzhou. *Geographical Research*, 38(6): 1333–1342. (in Chinese)

乡村旅游空间变迁：以中国湖北沐抚镇为例

陶 慧¹, 高 璟², 陈凯强³

1. 中央民族大学管理学院, 北京 100081;
2. 北京工业大学建筑与城市规划学院, 北京 100124;
3. 北京理工大学管理与经济学院, 北京 100081

摘 要: 在由旅游消费为主导变迁的社会, 乡村的整体社会裂变在空间变迁中可窥一斑。本文将乡村旅游地区的空间解构为旅游吸引物 (Attraction, A)、小镇 (Town, T) 与村落 (Village, V) 三类要素, 三者多元交互, 共同组成了乡村整体景观格局。文章以湖北省沐抚镇为例, 展现了 2006–2016 年 10 年间, 因为恩施大峡谷这一核心景区的带动, 沐抚境内产生的土地异化、物质空间、社会关系及景观格局的更迭。通过对 A、T、V 三者空间变迁特征的研究探索出它们虽存在地理分异现象但却有着相同的空间演化趋势: 旅游吸引物 (A) 呈现多元化及全域化特征; 配套服务向小镇 (T) 集聚, 促使乡村聚落的城镇化演变; 村落 (V) 凸显景观意象, 传统乡村效益向复合化发展。本文从地理学、人类学和旅游学等多学科角度出发, 建构“ATV”三要素的协同框架, 为解释当前中国乡村旅游空间的现实、问题和趋势提供了一种客观中性的建设性的分析框架。

关键词: 乡村旅游; 乡村变迁; 吸引物; 小镇; 乡村; 中国