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## How to Produce Cultural Space for Sustainable Development Towards Rural Revitalization: A Case Study of China

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### KEYWORDS

*rural cultural revitalization, space production, sustainable rural development*

### ABSTRACT

Cultural revitalization is a key factor in the sustainable development of the countryside and is included in the five-dimensional indicators of China's rural revitalization strategy. Although established studies have examined the spatial dimension of rural cultural revitalization, the internal structure of spatial production and the logic of action are still not entirely clear. Based on an interview survey in villages in northern Henan, China, this paper conducts a qualitative study of the structured characteristics of rural cultural spatial production and the actor logic behind it using a grounded theory research method. The results show that the production of local cultural space, socio-cultural space, mass recreational space, and cultural industries space constitute a composite structured rural cultural space. Public power, intellectual elites, residents' rights and industrial capital have demonstrated a “co-constructive” cooperative relationship. This paper provides a theoretical and empirical basis for promoting rural cultural revitalization and sustainable development through the production of rural cultural space.

### 1. Introduction

In the era of industrial and technological civilization, sustainable rural development has become a hotspot and a focus of attention for governments and academics around the world, and is of great relevance to both developed and developing countries [1][2]. As a major agricultural country in the world, China's strategies and actions in the field of sustainable rural development will have an important impact on the global governance of agriculture and rural areas. However, with the transformation of China's rural society, the changes in the rural social structure and cultural order have brought

conflicts such as subjective crisis, weakening of values, and the impact of modernity to China's rural culture [3], which is not conducive to the sustainable development of rural culture. In the Chinese context, especially in official parlance, the scope of culture is relatively broad and typically encompasses excellent traditional culture, historically formed customs and habits, social ideology and morality, literature and art, and value systems, etc. In light of the actual circumstances in Chinese rural areas, this usually comprises customs and habits, cultural heritage, literary and artistic activities, and ideology and morality. The 19th National Congress of the Communist Party of China (CPC) proposed the

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“Rural Revitalization Strategy” as a strategic arrangement for the sustainability of rural development. In this conference document, “prosperous industries, ecological livability, civilized rural customs, effective governance, and a rich life” were defined as the general requirements of the rural revitalization strategy. In October 2022, the twentieth national congress of the Communist Party of China (CPC) further explicitly proposed “accelerating the construction of a strong agricultural country, and solidly promoting the development of rural industry, talent, culture, ecology and organization.” The Chinese government believes that sustainable development of rural areas depends on positive performance in these five dimensions of rural society. The practice of the countryside in the five dimensions of industry, talent, culture, ecology and organization has become a key indicator for measuring the sustainable development of the Chinese countryside. For the revitalization of rural culture, its indicators encompass the rejuvenation of rural historical and cultural traditions, the elevation of ideological and moral standards, the prosperity of residents' cultural life, and the level of cultural industrialization.<sup>1</sup> As the revitalization of rural culture gradually becomes part of the national strategy, maintaining the sustainability of rural culture is placed in an increasingly important position [4].

From the perspective of the time node, rural cultural revitalization was put forward during the period when Chinese society was undergoing modern transformation, bringing rural development in China to a new stage. The question raised in this paper is: Since time and space constitute the two dimensions of human practical activities, what does the spatial dimension mean for rural cultural revitalization? Specifically, what kind of cultural space is needed for the sustainable development of rural revitalization? What are the components of such a cultural space? What are the measures through which they can be produced? How do actors work together and are there conflicts? Exploring these questions is of great theoretical and practical significance for realizing the sustainable development of rural culture and the countryside as a whole. Therefore, the researcher went into a typical Chinese village in the northern part of Henan Province and conducted semi-structured interviews with township government staff, village committee members, village cultural organization staff, and villagers' representatives, and coded and analyzed the resulting 30,000-word interview texts using Nvivo12.0 to explore the practice of sustainable rural cultural space production and to explain its structure and mechanism. The study aims to provide theoretical

and empirical evidence for rural cultural space production in order to promote the development of the practice of rural cultural revitalization, which in turn supports the sustainable development of rural society.

## 2. Literature Review

This research focuses on the spatial dimension of rural cultural rejuvenation. Put differently, how do rural cultural spaces support sustainable rural development – known as rural revitalization in China? It should be noted that “rural cultural space” remains a rather broad concept, which can have numerous interpretations or typological divisions, and can also be differentially examined based on geographical variations. This issue has already received attention in relevant studies. To clarify the knowledge gap, after sorting through representative literature, we categorize the research on rural cultural spaces and rural sustainable development into the following aspects.

First, the types of rural cultural spaces. Concepts are crucial to academic research, which is the first step in the study. The concept of “culture” has a broad definition, and different studies take different focuses, which leads to different “rural cultural space.” In representative literature, it has the following concepts: (1) Rural public cultural space. Cai X.M. and others used this concept in their research, whose core dimensions are in the physical, power, and symbolic spaces of rural culture [9]. Liu D.L. and Wang K.Q. used this concept in their research as well, but they defined rural public cultural spaces as the places where rural residents participate in cultural activities [10]. Obviously, this concept is more inclined towards the physical attributes of space. (2) Rural cultural memory space. Zhang X.Y. and Li Z.T. used this concept to explore China's rural cultural development, which is related to people's spatial perception and is believed to have a stress-relief effect through landscape design [11]. (3) Rural social cultural spaces. This concept was used in the research of Hu X.L. et al., which is considered the sum of rural social and cultural spaces [12]. (4) Rural tourism spaces. This type of cultural space is related to rural tourism, but tourism activities focus on human rather than natural scenery. Liu X.D. et al. defined it as an experience object for rural tourists in their research [13].

Second, the positive impact of rural cultural spaces on sustainable development. Various rural cultural spaces have been studied by researchers, who have answered the role mechanisms of rural cultural spaces in sustainable development from different

angles. Representative literature and views include: (1) Rural cultural spaces enhance residents' happiness through the influence of place attachment. After verifying this view with 1,755 residents, researchers conducted a survey [9]. (2) Rural cultural spaces promote self-development of farmers by mobilizing their active participation in cultural governance activities. Researchers entered this issue from the perspective of cultural governance, explaining the flexible interactive relationship between farmers and the state in rural cultural governance [14]. (3) Promote fair development of rural cultural heritage areas through social space production. Research suggests that through space production, the imbalanced development of cultural heritage areas caused by capital input and power games can be improved [15]. (4) Rural cultural space production can effectively bridge the psychological gap between indigenous residents and new residents. Research shows that the reorganization of rural spaces can effectively bridge the differences between new residents and indigenous residents in terms of status, cultural identity, values, etc. in the process of rapid urbanization [16].

Third, the influencing factors of rural cultural space production. The production of rural cultural space is a complex process that is influenced by various subjective and objective environmental factors. Related literature has pointed out the following two points in close relation to this. (1) Rapid urbanization process. The rapid urbanization process in modern society in developing countries is accompanied by a decline in rural population and culture [17], which is a grim reality that is constantly driving the transformation of rural spatial functions, making the productive agricultural spaces increasingly develop cultural functions and thus giving birth to rural cultural spaces [18]. The large tourism demand brought about by urban development also plays a similar role [19]. (2) Public policy. The positioning of rural development in national institutions and government public policy affects the development of rural culture. A study examined the development of rural cultural spaces in the context of institutional layering, and the different positioning of rural areas in public policy leads to their exclusion from urban and consumption culture spaces [20].

Based on the above literature, this paper believes that there is still room for further exploration in the study of spatial elements of rural cultural revitalization. First, researchers have discussed various types of rural cultural space, such as rural social and cultural space and rural tourism space. But are they independent of each other? Will they be intercon-

nected and influenced by each other? Due to the lack of integrative examination of these different spaces, the relationship between cultural spaces and the overall rural space is ignored, and this is not clear. Second, in the aspect of the impact of rural cultural spaces on rural sustainable development, researchers have examined the mediating effects of rural cultural spaces, but have not highlighted the practical mechanisms of cultural revitalization through rural spatial evolution, i.e., there is still a lack of analysis of the internal structure of rural spaces and their logic in cultural revitalization. Third, in the influencing factors of rural cultural space production, urbanization, population, and public policies have been included in the existing studies, but they are not at the same level. It should be noted that rural areas have various actors, including the government, villagers, and tourists, and what roles do these actors play in the production of rural cultural spaces? In addition, in the intrinsic characteristics of rural cultural spaces, although some studies have attempted to conduct structural examination of this issue, the answers to this question often depend on spatial theoretical models and lack evidence from practical experience.

In summary, we believe that this study contributes to the theoretical discussion of the issue in the following ways: (1) By integrating various cultural spaces identified through coding analysis into a holistic perspective, this study views them as structurally produced rural cultural spaces. Examining rural cultural spaces from the perspective of the whole rural space and evaluating the role of cultural space production in the overall process of rural revitalization is part of the study. (2) This study focuses on the actor factors in the practice of rural cultural space production and systematically analyzes the impacts that multiple subjects in rural society have on this process. (3) Examining the internal structure of rural cultural spaces based on empirical research will provide more empirical information and evidence for the structural analysis based on theoretical models. (4) Unlike existing analytical perspectives, this study includes intellectual elites and civil rights in the scope of investigation and interview, exploring the influence of power, knowledge, rights, and markets on rural culture.

### 3. Theory, Materials and Methods

#### 3.1. Theory

In recent years, spatial theory has been increasingly emphasized and applied in various fields of research by Chinese scholars, and the spatial turn in

philosophy and social sciences after the mid-twentieth century has contributed to a renewed understanding of social, political, and historical issues, including, of course, culture [15]. Lefebvre's trinity theory of space reveals the political, practical, and living nature of space, which makes people's understanding of "space" go beyond the geographical and physical connotations of "place" and "territory" [16]. Although Lefebvre does not directly explain the term "cultural space", he argues that space can be marked in the abstract using discourse and symbols when discussing spatial production. Space then acquires a symbolic value, and this expression implies the cultural attributes of space, thus providing a theoretical possibility to explain the development and evolution of cultural space from the perspective of spatial production. Since then, the cultural and emotional properties of space have been further clarified in Turgot's research [17].

In the field of rural cultural studies, along the lines of Lefebvre's reflections, rural cultural spaces are usually distinguished as spaces of power, spaces of perception and spaces of life. This distinction is in line with Lefebvre's theory of spatial production, but the structured theoretical model is not necessarily suitable for all spatial studies. After all, the sustainable development of rural culture in different regions always faces different problems due to different policies, histories and socio-economic backgrounds. Especially in China, the different degree of urban-rural disparity, differences in local policies and heterogeneity from customary traditions make the development of rural culture in China more complicated. Empirical and practical evidence must be taken into account in the scope of the study. Therefore, the application of spatial theory in this study is more in the way of thinking and the logic of analysis, and the practice situation of the case sites will be largely included in the structured analysis of rural cultural space.

From a spatial perspective, we can define rural cultural space as a public space defined by the cultural attributes of the rural space as a whole, which includes both the physical carriers that carry the cultural activities of the residents, as well as the non-material contents of traditional culture, folk customs, ideology and morality. Rural cultural space is not a pre-existing, static, but a relational, productive existence. It can be said that this space is not only dependent on the rural space in the physical or geographical sense, but also will acquire a relatively independent attribute along with the implementation of the strategy of cultural revitalization and artificial construction. This property points to the shaping of space by people as individ-

uals or groups and is also constrained by various structural elements, such as political structures, when people produce the cultural properties of space [18]. We believe that this analysis remains within the scope of spatial theory and is in line with the line of research indicated by Lefebvre. Based on this, we define the rural culture space production as a process in which diverse rural on-site actors manage, reshape, and update rural cultural elements such as traditional customs, moral and ethical beliefs, etc., through their practical activities to highlight the cultural identity of rural spaces.

We believe that rural cultural revitalization is the process of reshaping the spatial structure of rural culture and rebuilding the spatial value of rural culture in the modern transformation of traditional villages, so that the cultural attributes of rural space can be manifested. This research needs the guidance of spatial theory for the following considerations. First, as the core object of the spatial theory system, spatial production theory helps to recognize and analyze the internal structure of rural cultural revitalization, i.e., what organic parts the cultural space of rural revitalization consists of. This will provide principled and goal-oriented guidance for our coding analysis. Second, spatial theory considers scale reconfiguration as the core mechanism to see through the process of spatial production and to realize the goal of spatial justice, which is mainly the process in which elements such as power relations, power structures, and resource allocations of spatial actors are changed so as to form new spatial scales [19]. This provides a perspective that can be relied upon to analyze the power relations of rural actors. Rural cultural revitalization is a systematic project, and its spatial practice involves multiple subjects such as governmental public power, citizens' private power, technological power, capital power, etc., and the power scale becomes an important perspective for analyzing rural cultural revitalization. Combining spatial political theory to explore rural cultural revitalization, we should analyze the cooperation mechanism and tension logic of rural power subjects in the field, and propose the practical direction of power adjustment on this basis. In other words, in the production of cultural space for sustainable development in the countryside, the internal structure of cultural space and its subjective logic affect the process of cultural revitalization in the countryside. This is the inspiration that spatial theory brings to this study, and it also shows the applicability of this theory in the study.

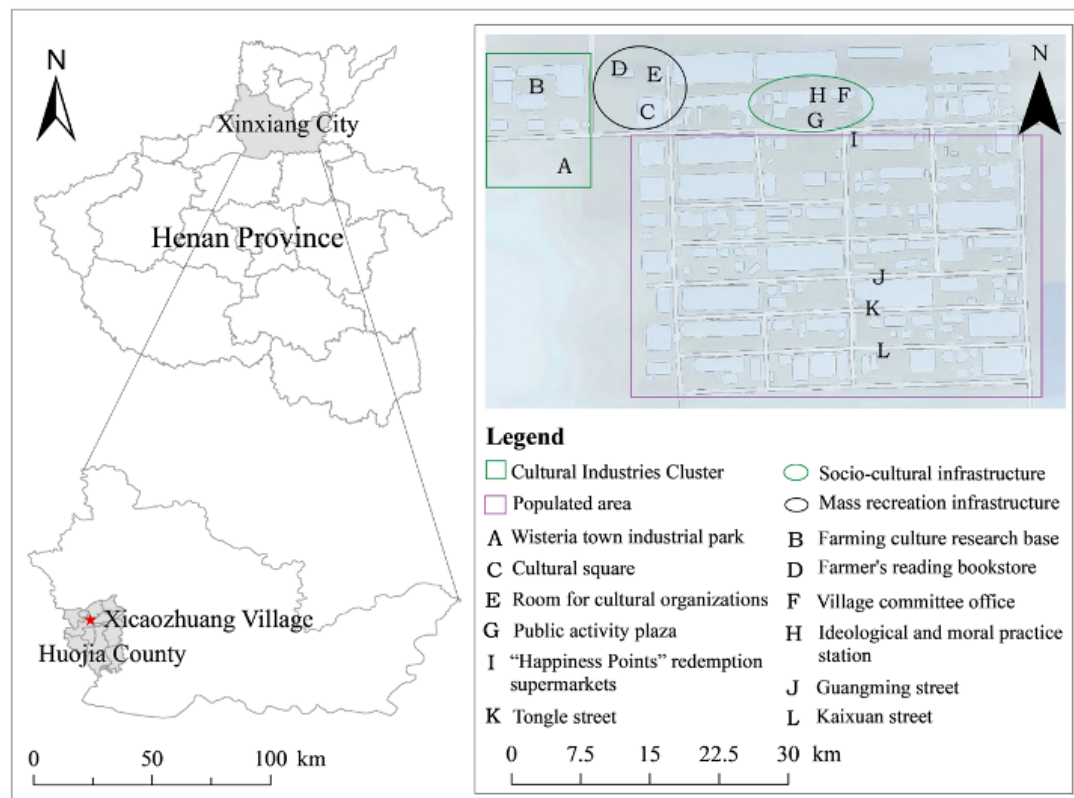


Fig. 1. Geographic Location of Xicaozhuang Village and Distribution of Cultural Facilities in Henan Province

### 3.2. Materials

#### 3.2.1. Case Site Profiles

This study conducted research and interview activities in Xicaozhuang Village. The main reason for conducting the research here is due to the consideration of such recursive relationships: (1) Rural cultural development is a worldwide topic, and as the world's largest developing country and a large agricultural population, China's practice cases can provide empirical references for this topic. (2) Some typical traditional villages, those villages that have been greatly influenced by history and culture, have more prominent significance in the transformation and development of culture in modernity. In China, a large number of these villages are clustered in the Central Plains, especially in Henan Province, which carries the thick historical and cultural memories of China. (3) Xicaozhuang village, located in the north of Henan Province, has the local characteristic of "alliance culture", which is related to the story of King Wu's conquest of King Zhou in Chinese history. We believe that this village's emphasis on distinctive culture and its attempts at industrialization are worthy of reference. To summarize, in a situation where traditional village culture is facing difficulties in transformation and weakening of subjectivity, the development

strategy of cultural revitalization in Xicaozhuang Village provides a typical and good case for this study.

Xicaozhuang Village is located in Shizhuang Town, Huojia County, Xinxiang City, Henan Province, with a total of 212 households and 912 people in the village, which is divided into four villagers' groups. The village is located in the southwestern part of Huojia County, 30 kilometers away from Xinxiang city and 5 kilometers away from Huojia County, adjacent to Xinjiao Highway in the north, and the Tsukafeng Line passes through the western part of the village.

In the early days of China's reform and opening up, Xicaozhuang Village was one of the first villages in Shizhuang Town to build a new countryside, with unified planning carried out as early as 1983, and housing remodeling carried out in the mid-80's. 2009 the end of the year, the village through the village collective fund-raising and villagers donations to build the elderly activity center, and then successively built the cultural square, farmhouse, civilization, cultural center and cultural center. The village has established a cultural cooperative to manage the cultural facilities in the village, and since 2014, the village has set up a drum team, dance team, Yangko troupe and other cultural organizations, and the development of the village's cultural undertakings has become increasingly ma-

ture. 2021, Xicao Zhuang village has become a pilot village in the town of Shizhuang for the promotion of rural revitalization and development, and the government has invited experts from the think tank to stay in the village. And through the “village collective capital + villagers share + enterprise investment” to set up a farming culture study base, forest restaurant and other collective industries, integrating the resources of various cultural organizations in the village to help the village achieve the transformation and development. At present, the study project has been fully completed and put into use, receiving students from all over the world and study teams no less than 3 times a week, the village cultural organizations to carry out various activities on a regular basis, forming a village cultural revitalization pattern under the leadership of the village two committees, with farming culture study base as the industrial backing, based on the cultural organizations in the village.

### 3.2.2. Data Material Collection

In order to examine the behaviors of different subjects and their roles in the spatial production of rural cultural revitalization, the objects included in this study include four types of subjects involved in the cultural revitalization of Xicao Zhuang Village: the government and village committees, think tank experts, cultural organizations, and villagers. Therefore, this study takes the staff of the government and village committees, the members of the think tank expert group, the members of the village cultural organization, and the villagers as the interviewees, and goes to Xicao Zhuang Village for field research in the early stage from July 5 to 15, 2023, during which a total of 12 people were interviewed, and then later on contacts the interviewees and carries out the tracking return visit through telephone and WeChat. In the field research stage, potential

interviewees were contacted through recommendations from acquaintances, and then the sample size was gradually expanded through the “snowballing” method, and the interviews were audio-recorded after explaining the purpose of the research and obtaining the consent of the interviewees. At the end of the field research, more than 30,000 words of text were obtained through transcription of the audio files. The sample of field interviews is shown in Table 1, where ZC represents government and village committee staff, ZK represents village-based think tank experts, WZ represents members of village cultural organizations, and CM represents villagers.

### 3.3. Methods

Grounded theory is a mature and influential qualitative research method, which has been more and more popular since the 1960s. The value of this research method lies in producing richer conceptualization of data coding and possible interpretation of data observation [20]. It has significant advantages in collecting data, defining core concepts, exploring the relationship between social phenomena, constructing theories and so on. As a concept and theory generation method, grounded theory can deal with different forms of data, usually qualitative interviews [21], also including focus groups [22], participatory observation [23] and quantitative data [24]. Classical grounded theory usually defines the research procedure as (1) open coding, (2) selective coding, and (3) theoretical coding [25]. The first two procedures point to the substantive coding and analysis of the data, while the theoretical coding is the construction and interpretation of the model.

The applicability of the methodology lies in terms of the purpose of this study and the characteristics of the data. First, this article undertakes an exploratory study on rural cultural revitalization

Table 1. Basic information of interview sample.

Basic information of interview sample	Gender-based	Age	Social Status
ZC1	Woman	34	Government staff
ZC2	Man	48	Members of village committees
ZC3	Woman	55	Members of village committees
ZK1	Man	39	Think tank expert
ZK2	Woman	35	Think tank expert
WZ1	Woman	44	Membership in cultural organizations
WZ2	Man	44	Membership in cultural organizations
WZ3	Woman	47	Membership in cultural organizations
CM1	Man	69	Villager
CM2	Woman	20	Villager
CM3	Woman	46	Villager
CM4	Man	37	Villager

from the spatial perspective. Therefore, it is suitable to use grounded theory for qualitative analysis. Second, as a qualitative study, the data collected in this paper are interview texts. As mentioned earlier, g This type of data is within the analytical purview of grounded theory. In this study, qualitative textual data were collected through semi-structured interviews. Using Nvivo 12.0 as a tool to collate and analyze the interview data, according to the results of the analysis, the production structure model of cultural space for sustainable development is constructed.

It should be noted that although grounded theory has gained increasing application, the possible limitations and subjectivity in the coding process are well recognized. To avoid deviations in the coding analysis, the following efforts were made: (1) At the coding stage, each member of the team conducted independent conceptualization and coding to prevent subjective randomness in the coding process. Any differences and disputes that emerged during this process were reviewed and discussed collaboratively within the team, and a shared final coding list was formulated after identifying similar-

Table 2. Examples of open coding analysis

Texts of interview materials	Initial conceptualization	Generalization
Because the rural areas, the most important thing is the development of agriculture, nowadays technology is getting more and more developed, but the most fundamental thing in the countryside is still farming, which is also a kind of culture in itself. (ZC2)	a1 The nature of rural areas	A1 Agrarian culture
It's true that what we farmers know best is farming, but it's really a culture that not only rural areas need to know about, but cities can learn about it as well. (CM1)	a2 Agricultural culture	
Our Huojia County is the town of alliance, according to legend, King Wu of Zhou and the lords of the alliance here in the mountain after the oath of the Makino war, after the end of the war in order to pay tribute to the memory of the dead warriors, the king of Wu in the graves to add soil, the formation of the seventy-two mounds of the Huojia, the largest one in the village of Caozhuang in the West. (ZC1)	a3 Local history and culture	A2 Allied culture
We actually had seven villages to choose from at the time to do this rural revitalization planning, and we finally chose this village also because it has this unique history .....(ZK2)	a4 Cultural uniqueness	
Our village's own children, from an early age, we must let the village children know this history and culture of their own ..... (CM4)	a5 Kindergarten education	A3 Responsibility awakens
Our village has its own kind of character, and it's everyone's kind of responsibility to develop it well. (ZK1)	a6 Responsibility for rural development	
Every year we have village representatives selecting the most beautiful family, the most beautiful in-laws, and so on, which are announced on the bulletin board of the village committee. (ZC3)	a13 Comparison of advanced individuals	A6 Model breeding
The judging was all very positive, it's a recognition and an honor for everyone .....(CM3)	a14 Participation of villagers	
Pension policy, social security policy, funeral reform and so on these national policies are often popularized to everyone, so that you also master this knowledge. (ZC2)	a27 Policy briefing	A13 Popularization of policy and theory
I think it is necessary to let the people know about some new theoretical knowledge of the Communist Party of China, and it is good to organize a little lecture or something for people to listen to. (CM2)	a28 Theoretical popularization	
Our research base has five types of handicraft programs including tea art and cloth art, all of which are staffed by full-time personnel who can guide students who come here for a comprehensive experience. (ZK1)	a63 Handicraft experience	A30 Craft project experience
Research base we also understand that the projects there are combined with the development of farming civilization, but also consider the culture of our village and the selection of personnel .....(CM4)	a64 Project selection	
.....	(Total 78 initial conceptualization)	(Total 36 generalization)

ities and differences. (2) During the coding process, an open attitude was maintained towards new and unexpected concepts, and they were reviewed in accordance with the research objectives. (3) Stringent attention was paid to the accuracy and consistency of coding to accurately interpret and present the research results in the subsequent analysis. (4) There are four types of subjects included in this study. In the theoretical saturation test stage, four Xicao Zhuang village related characters (one for each subject respectively) were selected again through theoretical sampling to carry out semi-structured interviews, and the same process of organizing and coding was carried out on the obtained interview data, and it was found that no new factors appeared in the obtained main categories, which indicated that the categories in the spatial production model obtained from the study had been saturated.

## 4. Data Coding and Analysis

### 4.1. Open Coding

Open coding refers to the continuous comparison and analysis of the qualitative information obtained in the preliminary stage of the study, before determining the coding of the central categories and their characteristics, breaking up the qualitative information obtained and carrying out a preliminary conceptualization and categorization, with the aim of discovering categories of concepts from the raw information, assigning corresponding concepts to each of the categories, and on the basis of which associated concepts are grouped together to form a category. In this study, Nvivo 12.0 is used as a tool to analyze the interview data word by word, line by line, and paragraph by paragraph using the free coding function, and 78 initial free nodes are formed. Afterwards, repeated comparisons are made between the nodes and between the nodes and the text of the interviews, and the initial concepts with a reference point of less than 2 are excluded, and concepts that are related to each other with similar meanings are integrated, so that 36 corresponding categories are obtained. The coding examples are shown in Table 2.

### 4.2. Axial Coding

Axial coding refers to the discovery or establishment of connections between the many conceptual categories obtained from open coding in order to unfold the logical connections originally scattered among the concepts, which requires the re-

searcher to cluster the concepts obtained from open coding based on the similarities and dissimilarities between the concepts through repeated comparisons to form the main categories and subcategories. In this study, through gradual refinement and based on the links between the 36 conceptual categories obtained from the open coding, a total of four main categories were identified that can unify the above concepts, namely, Local Culture Space, Socio-cultural Space, Mass Recreational Space and Cultural Industries Space (see Table 3), and the above four types of space together constitute the multidimensional spatial structure of the rural culture.

### 4.3. Selective Coding

Selective coding refers to the process of further analyzing and summarizing and integrating the main categories formed in the early stage, which is the process of forming a “story line” in grounded theory. Based on the concepts and categories developed by open coding and axial coding, this study explores the core category of “spatial production of rural cultural remodeling” through in-depth analysis of primary interview data and further develops the “story line” of this research.

As a representative place of farming culture and allied culture, the two local cultures have always been potential in the native rural space of Xicao Zhuang Village, without effective integration and development. Due to the improvement of economic level and the development of spiritual life needs, the village has built cultural infrastructures such as senior citizen's activity room, village library, etc., and gradually set up cultural organizations such as drum team and dance team under the leadership of the government and the village committee, which laid the groundwork for the development of the socio-cultural space and mass recreational space in the village. Along with the interaction of the above cultural venues and organizations in the village's native space, these two types of cultural space can be produced and reproduced.

As a result of cooperation with the local government, a group of think-tank experts focusing on rural governance and development have moved into the village, with the goal of “empowering the revitalization of villages and the development of the village”. ..... in this village to create a harmonious countryside where 'each one is beautiful, and the beauty is shared'.” (ZK2) This idea fits with the goal of village revitalization. After moving into the village, they found that Xicao Zhuang village “has its own location advantage, close to the county town, and also has its own characteristics of farm-



ing culture and alliance culture .....” (ZK2) began to work with the village two committees to integrate the village's cultural resources, create farming culture and allied cultural characteristics, carry out environmental renovation, build a farming culture study base on the basis of the old site of the abandoned elementary school, and build the “Furuwang Brewery” on the basis of the abandoned brewery, to comprehensively display the farming culture on the basis of wine culture, tea art, cloth art, and gradually promote the integration of culture and tourism,

and establish the “forest restaurant”, children's playground and so on.

While integrating local culture and developing cultural industries, the cultural space of the countryside can be extended, and in the process of multi-party cooperation and interaction, the space of local culture and the space of cultural industries are formed, and the production and reproduction of the four types of space together constitute the spatial production mechanism for the revitalization of rural culture.

Table 3. Analysis of axial coding.

Corresponding category	Main category	Secondary category
Local Culture Space	Integration of cultural resources	A1 Agrarian culture
		A2 Allied culture
	Cultural inheritance	A3 Responsibility awakens
		A4 Innovative forms of education
Socio-cultural Space	Model leadership effect	A5 The CPC members' driving force
		A6 Model breeding
		A7 Village-Enterprise cooperation
		A8 Material incentive
Socio-cultural Space	Building a civilized village culture	A9 Policy guidance and coordination by village committees
		A10 Strengthening village autonomy
		A11 Social organization communication
	Cultivation of new farmers	A12 Exchange platform building
		A13 Popularization of policy and theory
		A14 Production technology training
Socio-cultural Space	Centripetal cohesion	A15 Self-directed learning for villagers
		A16 Sense of ownership
		A17 Harmonious rural construction
		A18 Local flavor of life
Mass Recreational Space	Construction of cultural facilities	A19 Government supports
		A20 Participation of village sages
		A21 Contributions from villagers
	Cultural organization formation and development	A22 Personalized management
		A23 Villagers' needs
	Public cultural activities	A24 Funding and operations
		A25 Teaching of artistic skills
Cultural Industries Space	Industrialization of culture	A26 Independently conduct
		A27 Creative activities
		A28 Research and study system construction
	Cultural symbolization	A29 Digital technology empowerment
		A30 Craft project experience
		A31 Architectural painting
Cultural and tourism integration	Cultural and tourism integration	A32 Song writing
		A33 Cultural branding
		A34 Construction of supporting facilities
		A35 Tourism planning
		A36 Environmental remediation and protection

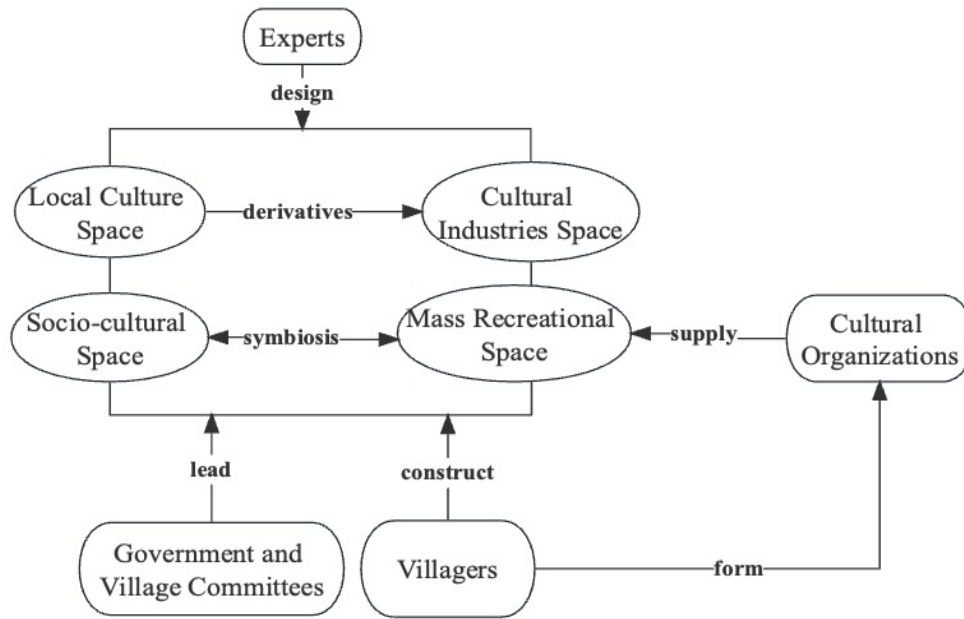


Fig. 2. a

### 5. Theory Construction and Interpretation: How Space Is Produced?

The results of the coding show some structural characteristics of rural cultural space on the one hand, and provide a basis for analyzing the influence mechanism of actors on the other. The production of cultural space oriented to the sustainable development of rural revitalization is not dominated by a single subject, but is the product of the forces exerted on rural space by different subjects based on their own needs and interests, and its core mechanism is the collaboration of multiple subjects, which stimulates the cultural vitality of the countryside. Studies have explored the interactions of power, value and capital in the production of cultural space in rural China [26, 27]. On this basis, this article incorporates experts as intellectual elites and cultural organizations as products of citizens' cultural rights into the network of actors in the production of rural cultural space.

From the 12 main categories shown by the axial coding, these activities are entirely carried out by different actors. Combining the 36 secondary category and an in-depth analysis of the interview materials, we can observe that: in the process of spatial production, the intervention and interaction of multiple sub-subjects lead to the construction of new vernacular cultural space, social cultural space, mass recreational space and cultural industry space on the fragmented rural vernacular cultural space. Vernacular cultural space, social cultural space and mass recreational space are endogenous spaces un-

der the influence of policies and people's demands, and the subjective role of the villagers and their practice of social interaction have had a fundamental impact on the production and reconstruction of spatial scales. The space of cultural industry is a composite space generated under the joint action of the internal subjects of the countryside and the external thrust of the market. It not only contains the cultural space embedded in the countryside, but also produces a series of derivative spaces along with the development of the industry and the further promotion of the integration of culture and tourism.

Based on the coding analysis and theoretical analysis, this study attempts to construct a sustainable cultural spatial production model for rural revitalization (Fig. 1). This includes the structural characteristics and actor logic of rural cultural spatial production.

Based on Fig. 2, the roles of different actors in rural society in the production of space and their relationships can be summarized as follows:

- a. In the production of local cultural space, because of the complexity of the expertise and programming required to organize the non-systematic cultural resources that exist in villages, the main actors in this process are the government and village committees. They take the initiative in exploring and integrating the cultural resources of the village and guiding the villagers to participate in the production of space, etc. With the think tank experts hired by the government and stationed in the village, the experts

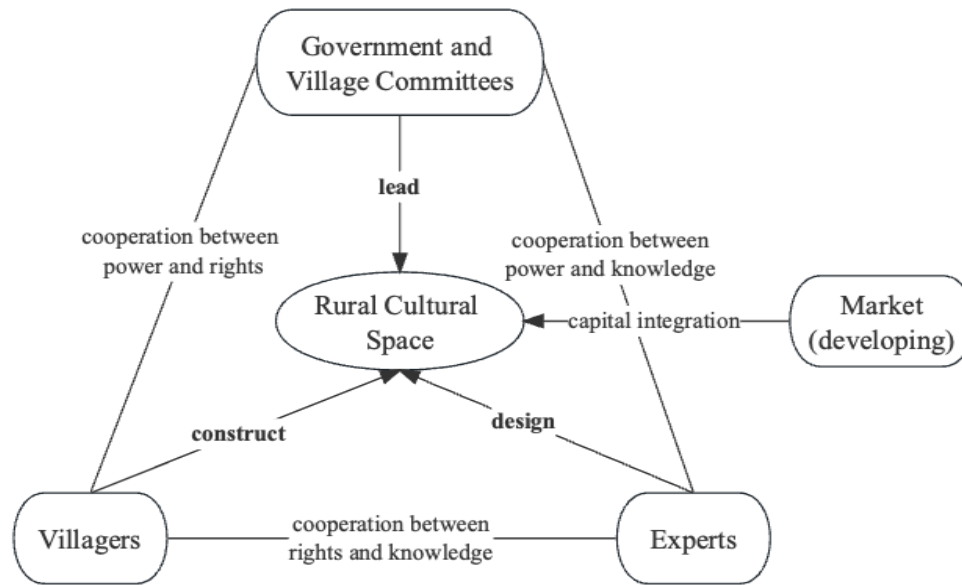


Fig. 2. b

Fig. 2. Sustainable Cultural Spatial Production Model for Rural Revitalization: (a) Roles of Rural Actors in Shaping the Four-Dimensional Structure of Cultural Space; (b) Interplay of Power, Rights, Knowledge, and Capital in Cultural Space Production, Including Villager-Established Cultural Organizations and Emerging Market Dynamics

have the right to speak on the overall planning of the development of the village, including the overall design of the production of local cultural space. In the process of government guidance and expert planning, the production of local cultural space can form a synergy only after the villagers' subjectivity has been brought into play by arousing their awareness and recognition of local cultural characteristics.

b. In the production of socio-cultural space, villagers occupy a central position in the production of space, and the main function of the government is to guide the direction of social and cultural development. The ideological and moral concepts of the villagers are becoming more and more perfect under the guidance of the government, and they are constantly exchanged and collided in the daily interaction practice, and this interaction is also the process of awakening the consciousness of the main body of space production. Along with the advancement of the process of rural civilization construction, the social and cultural construction of villagers' self-governing organizations is becoming more and more perfect, and the majority of villagers have changed from “followers” of spatial production to “pro-experiencers”, constantly updating the rural social and cultural space, so as to make it

develop into a promotion of rural spatial carrier of ideological and moral revitalization.

c. In the production of mass recreational space, the role of the villagers' subjectivity becomes the core of spatial production. This spatial production requires respect for and maintenance of the basic rights of farmers to independent choice, standardization, participation in the process and access to benefits, with the ultimate goal of farmers' happiness and satisfaction [28]. The public cultural services carried out by various cultural organizations formed by villagers as the main body of action provide the content of spatial production, which in turn renews the cultural needs of villagers, and the interaction between the two dominates the production and reproduction of mass recreational space. At the same time, the government and village committees also cultivate this space through relevant policy support and publicity and promotion actions.

d. In the production of cultural industry space, all parties are involved in the interaction and production of space: the government provides policy support, village committees are responsible for specific coordination, think-tank experts undertake planning and design, and all kinds of cultural organizations in the village rely on the construction of the industry for further devel-

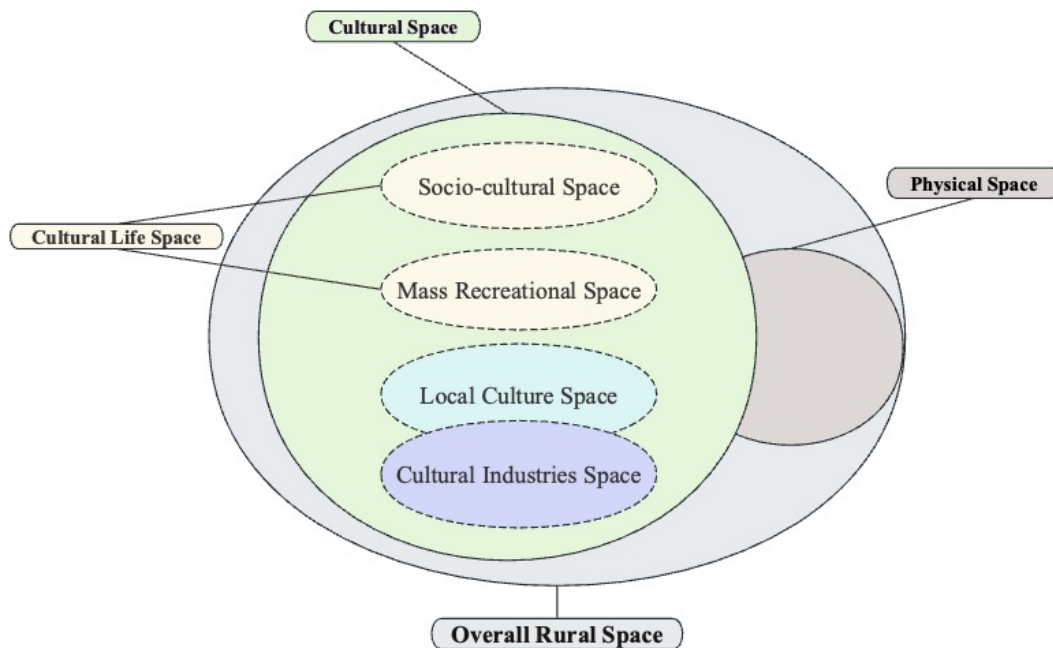


Fig. 3. The spatial system for rural cultural revitalization

opment, but from the perspective of industrial development and industry improvement, this space is always still centered around the villagers. The cultural industry relying on the local characteristics of culture has been set up from the beginning as a way of villagers' shareholding and joint management by the village collective, and only when the villagers' subjectivity can be brought into full play, the subsequent housing renovation, land use planning, capital turnover, construction and so on can be put into practice. Along with the establishment of cultural industries and the future development of cultural tourism integration, this space will welcome a large number of tourists, researchers and other foreign subjects, and their interaction with the subjects within the space will become an important formation mechanism of the cultural industry space in the future.

- e. In the spatial production practice of cultural revitalization in Xicaozhuang Village, all kinds of official media reports have continued to explain the logic of its spatial production, and these explanations of the official discourse system have also provided a reference for examining the results of this study in the process of grounded theory. In its report on the practice of cultural revitalization in Xicaozhuang Village, the Bureau of Rural Revitalization of Xinxiang City points out that the practice in Xicaozhuang Village “creates a civilized, festive, and harmonious atmosphere in the countryside, and guides

the masses to respect virtue and goodness, and to see the virtuous and the wise, so that the villagers' love for their hometowns and enthusiasm for their countryside are born from within and are continuously transformed into the positive energy of revitalization of the countryside”. In the official media's discourse construction of rural revitalization in Xicaozhuang Village, “homemade golden key” is always the core theme, fully reflecting the core role of villagers' subjectivity in the spatial production of rural cultural revitalization, and at the same time, revealing the logical underpinning that the promotion of rural revitalization must rely on the majority of the people; in addition to the following “Resource Integration, Highlighting Characteristics”, ‘Civilization Construction’, ‘Organization of Public Cultural Activities’, “Study Base Project” and other aspects of the report from the side of the local cultural space, social and cultural space, mass recreational space and cultural industry space co-production in the rural cultural revitalization of the synergy role.

To sum up, the spatial production of rural cultural revitalization is not only embodied in the production and reproduction of material space and its practices, but also implies the reconstruction of social relations that accompanies it, with different types of space being constructed by different relational subjects. The production of vernacular cultural space is based on the ability to integrate and creatively transform vernacular cultural resources;

the key lies in the ability of villagers to integrate into the new space guided and planned by the Government and professionals. Social and cultural space and mass leisure space have a symbiotic relationship in the village culture as a whole, which makes the development of social culture associated with the cultural needs of villagers, and the spatial production of both is dominated by villagers and the various cultural organizations they form. The spatial production of these two is led by villagers and their various cultural organizations. The spatial production of cultural industry is based on the construction of local culture to create cultural characteristics, and the professional planning and villagers' participation in this process play a crucial role. With the advancement of the integration of cultural industry and culture and tourism, the gradual improvement of the local economy and the process of spatial production will have a renewing effect on the social and cultural space and the mass recreation and entertainment. On the other hand, will influence the spatial production of rural cultural revitalization by guiding the healthy and orderly development of local culture and cultural industries related to it, and cultivating social culture and mass cultural organizations.

In order to show the spatial changes more intuitively brought about by the production of rural cultural spaces, we drew a network diagram of the relationships between different spaces (Fig. 3).

## 6. Conclusive Remarks

In existing research on rural revitalization, scholars have examined a great deal of spatial issues in the "physical-geographical" sense, including the spatial system of rural settlements [29], environmental graphics in rural tourism space [30], and the geographical distribution of the livability of rural space [31]. In fact, as long as there are human social activities, any space will have structural, social and even political characteristics. Physical and geographical spatial analyses certainly provide us with intellectual insights into rural revitalization and rural development, but they are also far from sufficient. Under the idea of spatial production theory, this article, based on survey interviews in villages in northern Henan, China, uses grounded theory to explore the sustainable cultural spatial structure oriented to rural revitalization and the cooperative mechanism of actors behind it. The results show that the spatial production of cultural revitalization is a process in which multiple actors and multidimensional spaces are jointly promoted, and local cultural space, social and cultural space, mass

recreational space, and cultural industry space are produced on the basis of local characteristic culture and old resources. The production process of multidimensional spatial structure stimulates the subjectivity of rural cultural revitalization and the characteristics of rural cultural construction, and supplies cultural resources and spatial carriers for the long-term sustainable development of rural culture. Cultural revitalization is an important measure to empower rural revitalization. The revitalization of distinctive culture, the revitalization of ideology and morality, the revitalization of public cultural life and the revitalization of the cultural industry constitute the "four beams" of rural cultural revitalization, which are put into spatial practice through the construction of the distinctive cultural space, the social and cultural space, the mass recreational space and the cultural industry space, respectively.

Till now, we contend that the conclusions and their interpretations obtained through the coding analysis of grounded theory as mentioned above are in line with the actual circumstances. This is primarily based on the following aspects. Firstly, coding analysis constitutes a crucial link in grounded theory, and we have adopted certain measures to avoid subjectivity in this process, as detailed in Section 2.3. Secondly, grounded theory relies on empirical data, which originate from social practices. We compared and restored the research results with the practical situation of Xicaozhuang Village: through communication with the members of the village committee and think tank experts, we presented this research and its conclusions to them, and they regarded it as realistic. Finally, this paper examines the roles of power, rights, knowledge, and capital in rural cultural revitalization. The actors in these four aspects are widely present in various political practices in China. We believe that the conclusions are in accordance with the practical situation of rural cultural revitalization in China.

This study provides a theoretical and empirical basis for understanding the network of actors and their cooperative relationships in rural development in the Chinese context: (1) The government and village committees have integrated the fragmented cultural resources in the countryside through the use of public power for policy guidance, cultural governance, and the construction of official discourse based on the demands of "order and development", constructing a power structure in the rural cultural space. It has constructed the logic of power in the rural cultural space. (2) As intellectual elites in the rural space, think-tank experts, based on their technical expertise and personalized management planning, supply the overall idea of rural cultural

development through resource integration and technological transformation, and construct the logic of knowledge (technology) in the rural cultural space. (3) Based on the goal of “livability and happiness” given to the rural space by the local villagers and the cultural organizations formed by them, the villagers play the main role of producing and reproducing the content of the rural cultural space through independent participation and active construction, thus constructing the logic of rights in the rural cultural space. (4) Along with the development of cultural and tourism integration and cultural industry in the future, the rural space will give rise to a kind of consumption and circulation space such as tourism space regulated by the market mechanism, and then the capital factor will also participate in the production of the rural space. This conclusion can complement the neglect of rural intellectual elites, citizens and their rights organizations in existing studies [26, 27,32].

The findings of this study may have practical implications for policy formulation, practice paths, and action strategies for sustainable cultural development in other rural areas of China. In empirical studies of cultural sustainability in rural China, southern regions with higher levels of economic development [33] and villages with well-established program support [34] are usually taken as the object of study. As a matter of fact, more Chinese villages are in the central and western regions without special support from the national, provincial or even municipal level. The level of economic development and the disadvantage of resource allocation make the cultural development of these villages face a lot of dilemmas, and the introduction of market and capital requires fine planning, and the discovery of economic growth points. Therefore, as one of the villages, based on the experience of villages in northern Henan, the four-dimensional rural cultural space found in this study provides a largely generalizable structural path for cultural space production oriented to rural revitalization: (1) The historical and cultural characteristics of villages on the ground provide the soil for the production of local cultural space and its transformation into a cultural industry, and at the same time, it is the fundamental dependence on which to get out of the dilemma of homogeneous development of rural cultural revitalization. (2) The production of social cultural space and mass recreational space has become an effective carrier for the villagers' subjectivity and public cultural life. (3) The creation of the four-in-one composite spatial form is more capable of providing cultural resources for the sustainable development of the countryside. (4) In addition to the ac-

tors' cooperation, this study analyzes the possible conflicts between them. This power asymmetry should be noted and addressed in more rural cultural revitalization practices.

It must be noted that the production of cultural space in the countryside is a complex and long practical process, and the research in this article is only a part of this major topic. In terms of the structure of cultural space production and its actor mechanisms, this study will continue. Future research includes, but is not limited to, the following questions: With the improvement and development of the cultural industry, will rural cultural spaces become increasingly commercialized due to market mechanisms after the entry of market players? How do the various cultural organizations in the countryside adapt to the market access? What is the specific interaction mechanism between rural spatial production and rural governance? Of course, conducting comparative research on different types of villages will also be an important academic direction, whether these types are classified from the perspective of economic level, regional characteristics, or demographic structure or cultural patterns.

### Author Contributions

Conceptualization, H.W. and C.L.; methodology, K.A.; software, H.W.; validation, H.W., C.L. and K.A.; formal analysis, H.W.; investigation, H.W. and C.L.; resources, K.A.; data curation, H.W.; writing—original draft preparation, H.W., C.L. and K.A.; visualization, H.W. and C.L.; supervision, C.L. and K.A.; project administration, H.W. and C.L.; funding acquisition, K.A. All authors have read and agreed to the published version of the manuscript.

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