

The Cultural Benefits of Natural Protection Based on Association Rules

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Abstract: With the cultural significance of nature protection as an analytical tool, this paper analyzes human attitudes towards natural objects by linking the objectives of nature protection with the cultural benefits of the environment, and examines the cultural effects between "human" and the natural protection environment. In this study, human intervention in nature and the environment needs to design rules based on human needs and relevant values. Association rules mainly include behavior rules, ethical principles and moral norms. These association rules often involve behaviors beyond a certain scope, but they are an important part of the purpose of nature protection. They establish an interdependence between society and nature. Through the association with these rules, people will be able to effectively reflect their attitudes towards and constraints on the way of nature conservation. At the same time, human beings have also made contributions to mankind through themselves.

1. Introduction

In today's increasingly serious environmental problems, people have formed the protection of the natural environment and changed the way people use resources. The protection of the natural environment is not only the protection of people's real homes, but also the protection of human traditional culture and spiritual homes. It is of great significance to deeply discuss the cultural interests of natural environment protection for promoting the protection and sustainable use of biodiversity and promoting the development of ecological civilization.

In the natural protection system, human beings have not strictly followed the laws of cultural influence and function. Isabel Pedersen introduced the prototype of TombSeer software, and focused on the use of the emerging 3D interactive holographic hardware platform to apply specific interaction to museum visits [1]. Sofia Pescarin's goal is to identify strategies, features and tools to develop education titles in a more efficient, cost-effective and valuable way, and develop its potential for education, cognition and participation in school and cultural tourism [2]. From the

perspective of carbon emission reduction policies formulated by the Chinese central government, Cui Wei analyzed the carbon emission reduction behavior of local governments in China under the constraint of hard environmental protection [3]. According to the research on the development of the world nature reserve system, there are many traps in the construction of nature reserves.

The behaviors that pose serious threats to human beings and natural resources in the natural protection system are attributed to the natural resource management mechanism based on stakeholder rules and information asymmetry rules in the natural resource property rights system. The result is that the interests of natural resource owners, users and other interested parties are seriously damaged. This paper mainly analyzes the harm of the environmental and cultural effects of natural protection to the protection of natural resources and the degree of correlation between the impact of association rules on the relationship between man and nature. By using association rules to analyze the cultural factors that affect the development and utilization of natural resources, the principle of stakeholder interest balance and the principle of ecological balance in the value chain are formed in the field of resource protection.

2. Analysis of Cultural Benefits of Natural Protection Environment Relying on Association Rules

Strengthen the publicity and education of environmental protection culture. To strengthen the construction of ecological civilization, people are required to consciously learn environmental protection knowledge, enhance the environmental awareness of the whole society, and make it become the conscious awareness of the whole society [4, 5]. Therefore, we should increase the publicity and education of environmental culture through various ways to make it an important part of education for all. At the same time, it is necessary to make the public truly aware of China's environmental pollution, enhance the public's awareness of environmental protection, establish the public's awareness of environmental protection, make the public generally concerned and consciously carry out environmental protection work, so as to stimulate the enthusiasm and creativity of the public to participate in environmental protection. In short, through education and publicity, the concept of environmental protection can be effectively permeated in production and life, so as to improve people's environmental awareness, scientific awareness and sense of responsibility. It is necessary to establish the concept of environmental culture in the whole society, integrate environmental culture into people's thinking and behavior, turn the idea of harmony between man and nature into people's lifelong ideal, and make environmental culture an important spiritual force to regulate people's way of thinking and life [6, 7].

2.1. Cultural Significance of Nature Conservation

The cultural significance of nature conservation is a big category, which is formed and developed gradually in the process of human development. The goal of nature conservation is to maintain the diversity and integrity of nature and protect the overall interests of natural ecosystems and biodiversity. The cultural achievements and human values produced in the process of protecting the natural ecosystem are the basis of its cultural significance. The way of nature conservation depends on human's attitude and understanding of nature and their relationship with nature. The way of natural protection will be affected by factors such as people's cognition and behavior mode to a certain extent [8, 9]. Therefore, these factors should be considered when analyzing people's behavior patterns and the relationship with nature.

2.2. Application of Association Rules

Association rules are a complex system. In the process of human intervention, how to use these rules to guide, constrain and regulate people's intervention? Since natural things are social animals, social animals and natural things are two different things. Therefore, in order to establish the interdependence between man and nature, it is necessary to use reasonable rules of conduct to guide people to make contributions to nature. From the perspective of the relationship between human beings and natural objects, it is a way of nature protection for people to use rules and norms. "People centered" is the most effective and universal method used to determine the objectives of natural protection based on the concept of nature: people centered can be achieved when considering the interaction between human interests and natural protection; When considering the interaction between society and nature conservation, pay attention to their interrelationships. The rules and evaluation system designed according to the above association rules reflect, to a certain extent, whether people have considered the value of human beings and the interaction between human beings and nature and others when formulating rules [10].

2.3. Cultural Effects Brought by Human Intervention in Nature

The cultural significance of nature itself does not lie in how much material wealth it has created, but in what living environment it has provided. In the process of exploring natural objects, human beings have great interest in this way. A series of interventions on nature itself have not only changed the nature itself, but also affected people's views on nature and social development. What cultural effects do people have before and after their intervention in natural behavior? The following will take the relationship between the cultural effects of human intervention in natural objects as the analysis basis, and focus on the relationship between the association rules and cultural factors on the cultural effects of human participation in natural conservation [11, 12].

2.4. Analysis on the Effect of Ecological Environment Restoration and Ecosystem Improvement

The ecosystem is an organic whole on the earth and the most important part of nature. The regulation ability of an ecosystem depends on the relationship between its regulation mode and other organisms. At the same time, it is the material basis for different species to survive and multiply in the natural environment. Therefore, the composition, structure and function of the ecosystem are important factors for human beings to influence the nature or transform the natural environment. People protect nature by changing nature, which is the most effective way to protect the ecosystem. The relationship between people and natural objects is used to assess the impact of the corresponding ecosystem itself on human welfare and the resulting environmental changes and risks [13, 14].

3. Experimental Design of Environmental and Cultural Benefits of Natural Protection Relying on Association Rules

Association rules were originally created to discover potential business opportunities behind business data. It aims to discover relevant information hidden in transaction data from transaction databases. Association rules are inclusive, similar to $A \rightarrow B$. A is called before association and B is called after association. On this basis, the mining methods of association rules are studied in depth [15, 16].

Strong association rule: for two items A and B, set the association rule $A \rightarrow B$, the minimum

support threshold Min_Sup , and the minimum confidence threshold Min_Conf . If the support meets the formula (1), which is greater than or equal to the minimum support, and the confidence meets the formula (2), $A \rightarrow B$ is a strong association.

$$Support(A \rightarrow B) \geq Min_Sup \tag{1}$$

$$Confidence(A \rightarrow B) \geq Min_Conf \tag{2}$$

3.1. Research Background

With the continuous deepening of China's rural construction and rural construction, the traditional villages in China's rural construction have become a rare cultural heritage.

In China, due to the continuous improvement of people's living standards and cultural quality, the protection of traditional villages has received great attention. Figure 1 shows the retrieval of traditional villages in CNKI as keywords. The following is the survey of traditional villages:

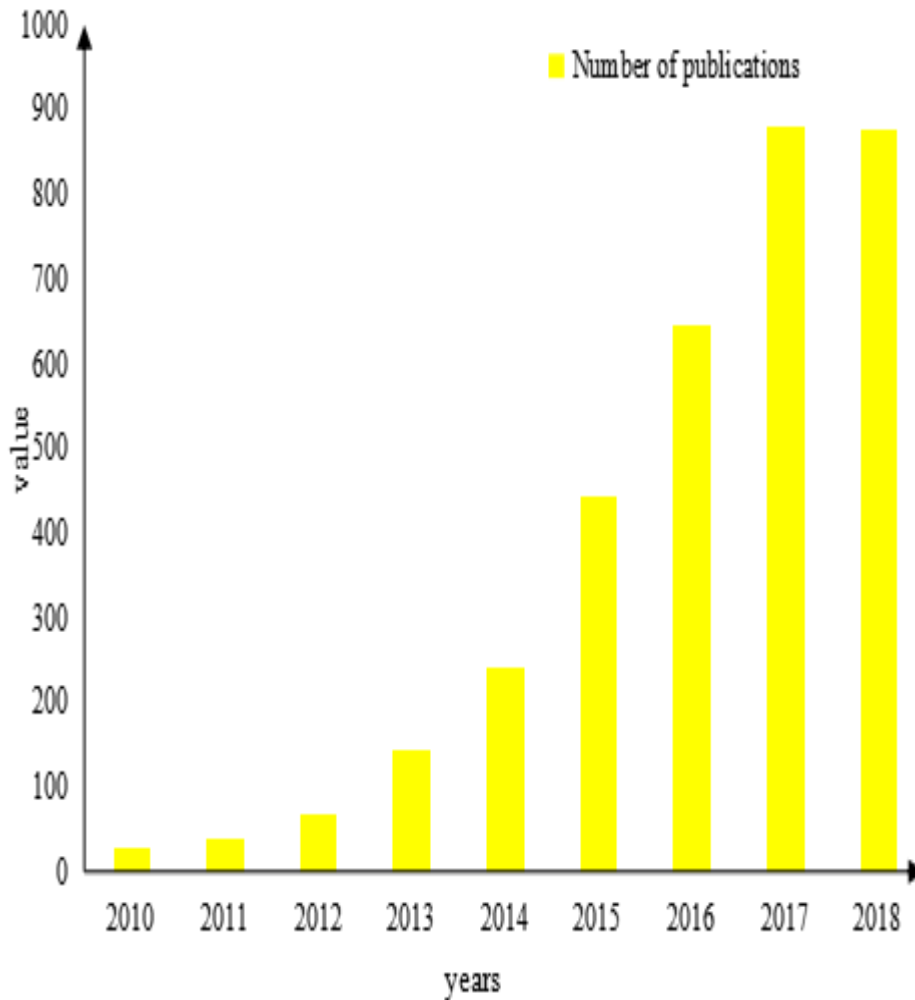


Figure 1. Number of traditional villages released

Since the 1990s, Chinese scholars have paid more attention to the protection of traditional villages. The village image proposed by Liu Peilin in 1994 mainly refers to the villages (structures) with clear meanings. A systematic study of the symbols of traditional village images is helpful to "restore" the spatial image of traditional villages, and can provide ideas for traditional village

culture, value of village folk customs, preservation of traditional villages, and planning of modern villages. Vigorously developing the new socialist countryside and paying attention to the protection of Chinese traditional culture have deepened the academic research on traditional villages, and expanded the scope and perspective of research [17, 18].

However, the research direction of traditional villages in China is relatively single, with single buildings, textures, landscapes, etc. as the research objects. The proportion of specific research content is shown in Figure 2. As far as the research level of traditional villages is concerned, there have been a lot of research results. The main research levels of villages are summarized below.

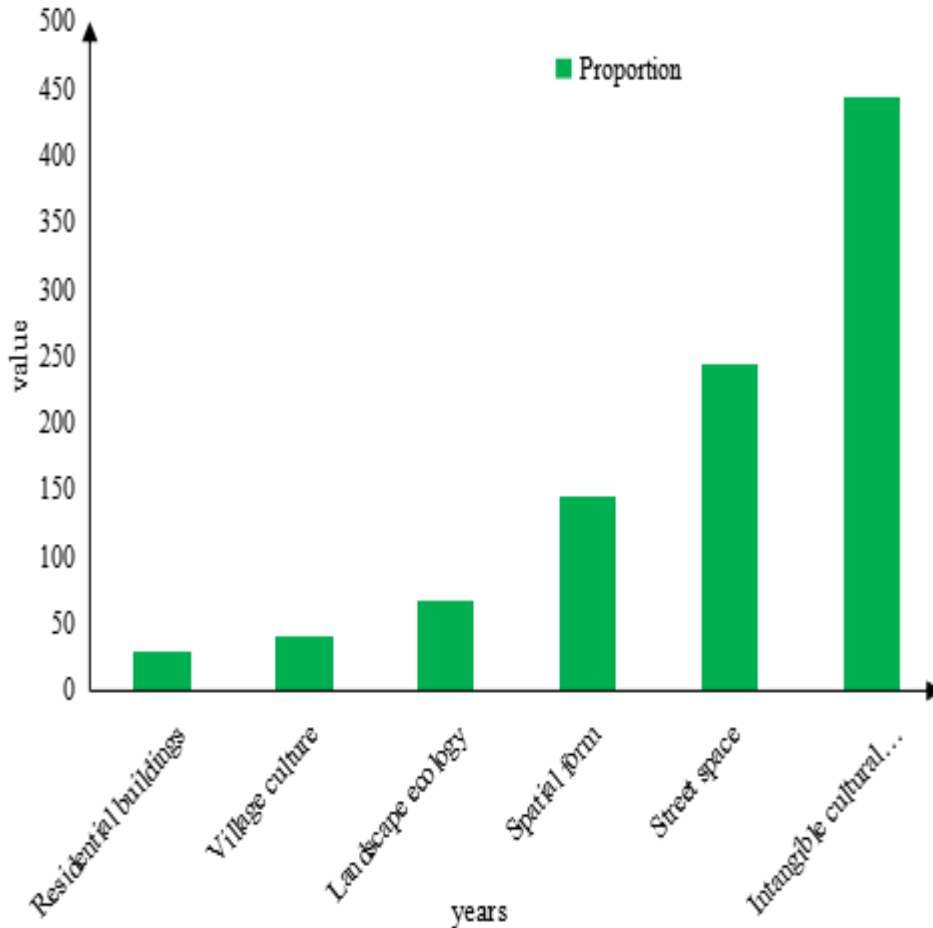


Figure 2. Research level of traditional villages

Traditional villages are typical representatives of Chinese excellent traditional culture. They are not only the continuation and inheritance of historical context, but also closely related to people's daily life. As an important cultural heritage, the protection, development and utilization of traditional villages have become an urgent task for all mankind. In recent years, due to the ongoing research in various fields, domestic scholars have studied traditional villages from all aspects, but the research from the perspective of cultural ecology is rare. In this paper, "cultural ecology" and "traditional village" are used as keywords for retrieval, and the number of results is shown in Figure 3.

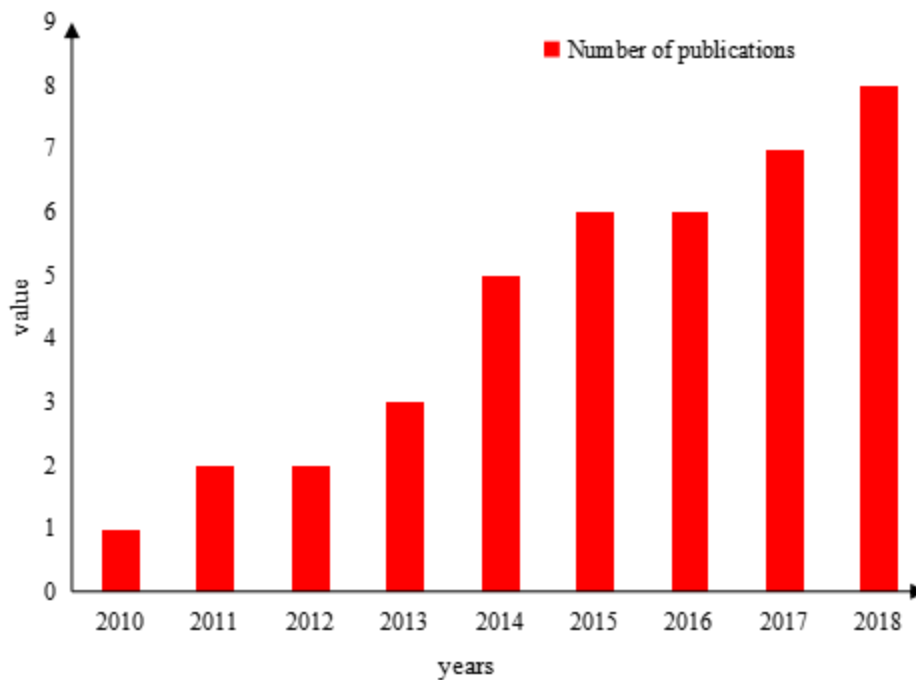


Figure 3. Number of studies on traditional villages from the perspective of cultural ecology

The research of traditional villages in the perspective of cultural ecology is mostly divided by region, and the research results are mainly based on the southern villages. Its research scope includes the research of traditional village space, the research of traditional village revival, the research of village protection, spatial morphology and spatial environment. Using the relevant theories of cultural ecology, this paper analyzes the relationship between the space and space of traditional villages, finds out the existing problems, and optimizes the space, environment and other aspects of them with the method of cultural ecology to achieve the healthy development of villages.

3.2. Analyzing the Impact on the Protection and Development of Traditional Villages from A Cultural Perspective

In traditional villages, the formation and development of traditional culture are closely related to external environmental factors and internal human activities, as well as the material, spiritual and institutional aspects of traditional villages. At the material level, the most direct and vivid form of traditional culture is displayed in the form of tangible material and cultural shell, such as layout, site selection, street texture, color, style and appearance. According to the view of cultural ecology, the formation and development of traditional culture are related to the natural ecological environment. From the spiritual perspective, religious beliefs, folk culture, traditional festivals and other cultural activities are derived from the spiritual culture, such as sacrificial performances, costumes, food, etc. From the institutional level, it involves family, economy, politics and other aspects, and involves the relationship between people, people and groups. The change of the system has also changed the traditional rural culture.

3.3. Analysis of Protection and Development of Traditional Villages from the Perspective of Ecology

Ecology is a subject that takes the relationship between biology and environment, biology and biology as the research object. From the perspective of ecology, the traditional village ecosystem

includes artificial environment and natural environment. The man-made environment is the center of human activities and the way of human production and life. The natural environment is to improve the quality of the living environment and provide a carrier for rural culture and history. In the typical traditional villages of Jiaxian County, a large number of places have been created due to the natural environment and man-made environment, which has laid a good foundation for its preservation and development. Among them, the composition of the man-made environment mainly refers to the residential buildings, village infrastructure, public production, residential facilities, etc. in the village.

4. Case Study on the Cultural Benefits of Natural Protection Environment Relying on Association Rules

According to relevant data, up to now, there are 160 traditional villages in Province A, 71 of which are in County A, accounting for 11% of the national total; County B has 28 selected Chinese traditional scenic spots, 17 selected Chinese traditional cities, and County B ranks first. Table 1 provides more details:

Table 1. List of traditional villages

batch	X Province	County A is shortlisted for X province	County A was shortlisted in China	County B was shortlisted in China	X Province was shortlisted in China
The first batch	320	34	4	5	16
The second batch	95	12	5	11	46
The third batch	96	4	3	5	37
The fourth batch	80	8	3	5	25
The fifth batch	220	13	2	2	36

4.1. Impact on Natural Environment

According to the traditional Chinese concept of feng shui, traditional villages are often closely related to the natural environment, some are close to mountains and rivers, and some are fertile land, which are suitable for villagers to live and live in. The unique environment and unique cultural characteristics are the forming elements of traditional villages. Due to the difference of geographical location, traditional villages will have different characteristics in different geographical locations. However, in the complex and changeable regions such as mountains and hills, it is easier to form traditional villages to some extent; In the same area, traditional villages are more likely to form in areas with complex geographical conditions. Compared with other areas in the Central Plains, the terrain of De A County fluctuates greatly, with low mountains and hills in the northwest and southeast. The change of terrain makes the overall layout and style of villages in A County more prominent, which is also suitable for traditional Chinese site selection. Therefore, it is less affected by external factors, and traditional styles, special architectural forms, traditional folk

culture, etc. are relatively easy to inherit, resulting in Jiaxian's traditional villages, which are well protected and have a strong traditional cultural atmosphere. Due to the complexity and change of the terrain, the connection between traditional villages and the outside world is limited, forming a relatively closed living environment, so there are many traditional villages in Jiaxian County.

4.2. Socio Economic Factors

The county economy, people's wellbeing, development structure and other aspects were analyzed and analyzed in detail (see Table 2). As mentioned above, County A has the largest number of counties in the province, so the development of regional economy has a great impact on the spatial layout of traditional villages. In the region of rapid urban economic development, due to the influence of modern culture, traditional villages have lost their original characteristics. In the economically developed regions, there will be more cultural exchanges and exchanges, thus forming a traditional village with rich cultural resources. In the contemporary era, where the rural population has decreased sharply and the process of rural integration is slow, there is a huge advantage to the heritage of traditional villages.

Table 2. Ranking of economic development quality of each county in 2018

county	Ranking of Y City	Ranking of X Province
A	1	40
B	5	103
C	3	82
D	4	95
E	2	52

4.3. Basic Viewpoints on Protection and Development of Traditional Villages

(1) The concept of ecological adaptation has been mentioned previously. The concept of ecological adaptation refers to the interaction, integration and evolution among people, environment and culture, and is the process of human social development. From primitive tribes to today's scientific and technological civilization, human beings are integrated with the environment and culture. The modern traditional village is a "primitive settlement", which should conform to the concept of nature, development with human civilization and ecological adaptation.

(2) The concept of sustainable development: sustainable development is a prerequisite for meeting the needs of modern society, without any impact on the needs of future generations. It was once believed that the resources provided by the world are unlimited, but today, with the social development and the continuous progress of information technology, people's ecological environment is constantly being damaged, and they recognize the value of resources, so they began to seek more long-term development. Under the guidance of the concept of sustainable development, rural revitalization will not go on a tortuous road.

(3) China has a long history and has a profound understanding of the importance of maintaining ecological balance. Only by coordinating the development of natural and cultural ecology can we create an environment suitable for human survival. In the process of the development of human society, human beings create culture, culture changes human beings, environment produces culture, and culture changes environment. Under the influence of external interference factors, traditional villages must be fully absorbed and digested to ensure their balanced development.

5. Conclusion

People do not realize that the natural protection system has had a huge impact on natural resources. This "being developed" phenomenon has existed for thousands of years, even tens of thousands of years. Its root is the "fear" of nature. The degree of people's unique "awe" of nature directly affects the ecological balance of the natural protection system. This is also reflected in the interaction between man and nature. This paper takes the social objectives and association rules of nature conservation as the research object, and discusses the relationship between human behavior and nature conservation objectives. Research shows that the goal of natural protection can be achieved after the interdependence between human beings and the natural protection environment is established, but the corresponding human behavior may damage the natural protection environment and lose more than it costs. Therefore, we must pay attention to the relationship between human behavior and environment, the comprehensive protection benefits it brings, and the association rules that have a positive effect on human health.

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Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

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