Organic Remodeling Strategies for Rural Idling School Buildings

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Abstract:
The reuse of idling school buildings in rural areas not only saves precious land resources, but also creatively makes use of nostalgic sentiments. It forms good regional network of the rural public systems. Based on the current situation of a large quantity of school buildings being idled, this paper analyzes the value and potential of these school buildings. Depending on the analysis of various resources, this paper argues the overall planning should be originated from the county level, and concludes that remodeling in rural areas should be directed by local needs, with six practical solutions proposed for the remodeling.

Keywords:
Idling School Buildings, Public Environment, Space Design, Organic Renewal

1. Introduction

Following the new urbanization in China, the trend of city population returning to rural areas and farmers moving to cities is increasingly obvious. The diminishing population in rural areas leads to a large quantity of public facilities and houses being idled and wasted. Meanwhile, due to the loosening of the policies on land use in rural areas, entry-level management lacks sustainable development strategies. There has been severe urgent demolition and construction. A large amount of resources are ignored and buried. Both the former construction of beautiful countryside and the current revitalization of the countryside, have promising visions. It is only in the practice where there is a series of issues such as lack of understanding of and emphasis on the cultural resources, misapplication, etc. This paper discusses the organic and sustainable methods for countryside remodeling, by the case of idling school buildings.

2. Current Situation of Idling School Buildings

Under the influence of urbanization, low mortality rates and the “school closure and merger” policies by the Ministry of Education, the number of elementary schools in China shrank from 491273 to 167009 between 2001 and 2017. More than 320 thousand elementary school buildings are idling. In this paper, I focus on the idling
elementary school buildings in rural areas. According to my interviews for nearly six months, questionnaires and references to the government documents, in the past 15 years, the number of elementary schools in Hubei Province reduced by 12616. No more than 10% of the idling school buildings were used as nursing homes and residential housing. About half of the school building structures is in good conditions, but because of its large architecture space, these buildings are not effectively used. In villages and counties, there have been no rules and regulations that properly plan to meet needs. Scientific overall planning and reasonable designs are missing. As a virgin area of development, this large quantity of school buildings in rural areas is in urgent need for research.

3. Results and Discussion

Since the Number One Central Document introduced the concept of rural revitalization in 2018, scholars in the research field think the core of the rural revitalization is to recognize and explore the value of rural culture. The exploration of cultural value in rural areas was raised to the highest importance in history. The basic feature of the Chinese tradition is density organized by tight orders. The public space is usually crowded. There is no doubt that for those who spent their childhood there, schools represent the quality of a village, a place where holds memories. People have irreplaceable emotional needs for campuses. “Migrant Birds miss their birth forests, while pond fish misses their birth ocean.” The mountains and water in one’s hometown carries nostalgic elements. This is an important indication of the home value of the idling school buildings.

In the rural revitalization strategies, practicing cost saving land use is still an essential issue that requires overall considerations. The advantages of reusing rural school buildings are that, it not only brings the idling land to life, but also awakes the usability potential of the land, which saves precious land resources. The overall planning of the city and countryside will creatively take advantage of the nostalgic sentiments, developing into good regional network in the rural public system, contributing to the countryside revitalization vision. Therefore, remodeling idling school buildings plays an important role in saving the land resources, improving public service systems in rural areas and performing the value of home culture.

4. Path Analyses on Remodeling of Rural School Building

4.1. Adopt both Domestic and International Experiences

After the Second World War, western Germany developed a countryside transformation campaign called “Our Village Should be More Beautiful”. Reasonable planning and construction in the countryside was implemented following the principle that rural areas should preserve their own characteristics and be able to self-upgrade. This includes the original form of the countryside, natural environment, settlement configuration, architect style, internal and external transportation. From the perspective of agricultural services, detailed practices include: rural tourism and nature preservation, horse riding schools and coffee shops, nursing homes, basic computer services, etc. On the basis of maintaining the same traditional rural structure, modern services are organically incorporated into rural areas. This practice is valuable for our own consideration.
At the end of 1970s, Japan implemented a campaign called “Village Building Movement”. The campaign aimed to revitalize industries, develop the beauty and specialties of rural areas and revitalize them. The campaigned called for “One Village One Product”, which developed the best features of many villages where had been previously ignored. The multi-value development in rural areas, which refers to industry, cultural and landscape, managed the rural areas as previous resources, repackaged villages into attractive areas. The systematical development of the cultural value in rural areas from people, humanity, industry, soil and landscape, and the detailed classification of science are worthy of analyzing and studying. In addition, Japan established laws and regulations before remodeling its rural areas, which is what we need for our own rural modeling.

In 1990s, the cultural construction committee in Taiwan implemented “Community Building” program with an emphasis on creating a new society, new culture, new people, and “Creating Landscape, Industry and People” as the community’s core concept. Under the influence of this movement, the village of Taomi, after a major earthquake, adopted the methods in the commentary section in the American legacy corridor theory. It established the only community level earthquake museum, using “Paper Church” as its spiritual support, creating a “Haven of Peace”. From the case study of Taomi in Taiwan, could we awake the cultural spirits of persevere and friendship among farmers, through this opportunity of organically remodeling old school buildings?

4.2. Conclusion on Remodeling Path Based on China’s Countryside Style

Under the new environment of rural revitalization, the production and life in the countryside transformed from traditional agriculture to new informatization. The public demand changed accordingly. First, modern agricultural production requires the support of modern technologies. China promotes human resources training project in rural areas, enabling farmers to learn knowledge, culture and technology. Such cultural life demand makes it possible that the idling school buildings may become human resources training centers. Second, the rural population is aging in a rapid speed, and the “City-Village Amphibious” nursing style has become popular. Therefore, a part of the idling schools may be remodeled into senior community centers. Third, farmers need Internet to market their people, villages and products. They need information networking platform for synthesized information sharing. Such demands create needs for information exchange centers in rural areas. Fourth, to promote harmonious development among farmers, transformation of the cultural construction is needed for the development of the rural public culture, which required reconstruction for farmers’ living space. Such public culture and medical centers are the emotional support for farmers. Fifth, the traditional culture resources and the living environment have been severely damaged. Many excellent folk culture and art are disappearing. They need urgent protection, which should become a major project for the national culture revitalization. The protection of traditional culture legacy and the construction of the cultural industry chain are indispensable links to establish specialty villages. Finally, according to different strategy analyses of the tourism resources in rural areas, idling school buildings can be remodeling into tourism facilities such as tourist service centers, homestays, or restaurants. (Figure 1) To sum up, there are many directions for the paths of school building remodeling. The vision for school building remodeling is particularly important. Plans should be made first. Be consistent with the rural infrastructure network. From the county level, statistics
should be prepared. Different villages and towns should have different overall planning, proactive in planning, so as to promote the school building remodeling projects. Based on the needs of each village and town area, plans should be made by year, region and time. Within the regions, an interactive public space network system should be built, to materialize the symbiotic relationship between the coexisting of culture value and revitalization in the rural areas.

![Diagram](image.png)

**Figure 1.** Road map of rural idling school renovation.

5. Case study

5.1. Problems Faced by Village Y

Based on the solutions to remodel idling school buildings mentioned above, the author proposed a “School+Travel” planning strategy, during a school remodeling project in a village in Hubei Province. About Village Y, one concerning issue is that the young and strong labor move to work in urban areas after the year of 2000. The interstate highway construction allowed convenient transportations to remote and isolated villages. As traffic to these villages increase, more people get to know about the beauty in the Red General towns in the area. People from cities began to visit these small villages. In a short period of time, the village areas are in the process of rapid upgrading. However, Village Y was not fully prepared for the visitors coming from all parts of the country. During the initiate stage of the village construction process, all levels of the government spent their efforts in solving new problems as they arose, instead of systematically planning for these villages. During the contingency problem-solving period, a large number of old houses were dismantled. Built on these old sites was some disorganized architecture. How to organically use the elementary school sites to upgrade the villages that could increase the sense of belongings among the residents of the villages? How to seize “weekend economy” to increase the residents’ income? How to sustain the village culture and maintain the harmoniously living environment in the countryside becomes a practice issue this planning assignment aims to solve.
5.2. Specific Implementation Strategy

Village Y’s reputation for being a Red General village is known by many. The village took advantage of the new trend in scholar tourism during school summer vacations, and proposed the “School+Travel” strategy, associating the reputation of the Red General town with the learning of the traditional culture. The purpose is to create a symbiotic relationship between cities and countryside. Through promoting scholar tours to countryside with the Red village culture as its core theme, the children from both the cities and the countryside will share their experiences in the mini cultural and educational camp. After developing the “School+Travel” upgrading formula, the village chose the name “Rain Mountain Institute”, upon comparative study, and began architecture operations. In order to pursue fashionable features, many of these operations are different from strictly protective models, such as the retaining, remodeling and building of the two-dimensional arrangements, and the design of three-dimensional arrangements and landscaping. Detailed operations include the following: Maximumly maintain the look of the original academic buildings and dormitories. Towards both sides of the village, the principle of preservation and low repair is adopted. Use local materials to build the surface of new walls and the recycled roof materials from old houses to cover the buildings. Regarding the landscaping design, decorate the trees along the boulevard leading to the village with special institute signature materials tied to the middle of tree trunks. Through introducing different cultures, these details will enrich the culture in the formerly quiet countryside.

![Quantitative technical roadmap for updating rural idling school buildings.](image)

6. Conclusions

Each village is unique and has different cultural qualities and specialties. A thousand villages have a thousand styles. How to position the directions, the widths, and the specifics of the school building remodeling are interrelated, which requires more comprehensive research. The importance is to analyze data from solid research, discover hot demands in rural markets, find the real needs in rural life, and have vision for potential markets and post-development markets. According to different school areas, different regional culture, organically develop practical strategies and methods. (Figure 2) In remodeling school buildings and implementing reconstruction
details, discover attractive elements, structures and relations, the relations of regional measurement, village measurement, site measurement, lot size and ratio, public space, semi-public space and personal space. Volume, proportion and size, quality, roof, windows, other details and surface materials are indispensable elements. “The process of creating a town is the process of heredity… Only when the language for the process control is widely used and shared, can this process be in order.”

Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

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