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Research on the design of children's nature education camp guided by rural natural experience -- a case study of Children's Natural Education Camp in Shijing Village

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Abstract: *With the continuous improvement of people's living standards, children's natural education has gradually entered the public's field of vision and has begun to receive widespread attention. Taking Shijing Village of Mountain in Fujian Province as an example, this paper profoundly discusses the design strategy of rural children's nature education camp based on Rousseau's concept of natural education to find an effective way to reconnect families, children, and nature, to promote the healthy development of children's physical and mental health, and to help the countryside. Revitalize to explore new approaches and strategies.*

Keywords: *children education camp; countryside; nature education; design strategy*

1. Discuss the necessity of educational Space and education camp

In philosophy, Merleau Ponty's understanding of Space has been widely recognized. He divides Space into three forms—first, body space. Physical Space is called the shell of habitual behavior (MARTINA REUTER, 1999). In this Space, the body exists naturally, and "the physical space that people often say can also fall into this category." This form of space is thoroughly objectified, and it is called the objective world and is the opposite of subject consciousness. The third is the vivid perception world of ordinary people. The intersection of the two spaces mentioned above, a free conversion between them, or a space with "ambiguity." The relationship between the body and the objective environment is neither the body stipulating the domain nor the objective Space stipulating the body (Coombes, 2010). In this way, space presents a visible and perceptible world to people: this world is physical, with geometric properties, and can measure length, width, and height in three dimensions; this world is the reality of life, the "I" of consciousness The existence of "I" is precise because of the "coexistence" of oneself (body), one's consciousness and the reality outside of consciousness (objective world) in the Space where "I" is located. Then, Space will be all-encompassing to the existence, that is to say, Space can be regarded as the sum of fact, and at the same time, all the content possessed by these existences in the same field is the content of space"(Augé, 1996). Space is the interaction between the subject and itself and the object, and the issue completes itself in the "encounter" with itself and others; Space is the combination of "human nature" and "human nature," in which people deal with various social relations hidden (Muradian, 2018). It takes people's way of life as the primary form of existence, and the creation of Space is the cultural creation implicit in the way of life and the discipline for people living in this Space; Space is inclusive and open, and multi-element Intercourse is the "reality" of the existence of Space, and the integration of new elements is the "should" of the fact of Space.

Education space is a co-construction of physical elements and humanistic elements (Lawn, 2001). As an essential growth resource for students, it should show a distinct educational nature.

- Promote the integration of physical Space and Virtual Space.
- Improve the complementarity between mainstream cultural Space and rustic cultural Space.
- Maintain an Effective link between on-campus Space and off-campus Space.
- Ensure the balance between restricted Space and Free Space.

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The above explanation of "space" provides a valuable reference for analyzing "educational space." In addition to the preceding discussion of "reproduction transmits human life, education transmits human culture and civilization," the connotation of educational Space can be understood: from the perspective of academic behaviors. Starting from a cultural and civilized background that cannot be alienated, it is an educational functional body constructed to better promote children's life growth and maximize their social and personal values (Silverman, 2017). The educational Space is mainly composed of two elements: natural landscapes and buildings surrounded by walls. Physical dimension; explicit teaching resources,—cultural landscapes, teachers' educational feelings, public opinion atmosphere, etc., constitute the humanities of educational Space—sexual dimension (Beasy, 2021). Whether physical or humanistic, at the beginning of the construction of an academic space, it needs to be carefully selected and designed to highlight the characteristics or needs of "educational," The elements that constitute the educational Space must also take "educational" as the standard. First of all, educational Space is the habitation of children's bodies and spirits. In the stretch of natural nature, they open their lives and open the door to the present and future life-world; the educational Space itself is an essential educational resource. The readers' tacit knowledge and explicit knowledge intentionally baptized the teenagers who were soaked in it in the "Silent Moisturizing."

Nature is also an indispensable part of students' growth. Nature deficiency disorder is a concept proposed "The Last Child in the Woods - Saving Children with Nature-Deficit Disorder," which describes the alienation of the relationship between children and nature at present and aims to arouse people's awareness of Comprehensive awareness of children's health and emphasis on nature education (Driessnack, 2009). Since the 20th century, the industrial revolution has made remarkable achievements. In a highly automated environment, children's lives have become more monotonous and mechanical (Afrianto, 2018). Children's natural play in nature is suppressed, and children are suffering from "nature deficiency disorder" The number increases daily. According to research, the lack of nature will adversely affect children's psychology and physiology, such as withdrawn personality, poor social skills, weak innovation ability, etc. Under this background, nature education emerges as the times require. The real purpose of nature education is to promote the natural growth of children in camp education.

2. Project Overview

With the implementation of a series of national rural revitalization strategic policies, rural revitalization has promoted rural tourism development, and agricultural leisure tourism has gradually entered the public eye. It not only encourages the countryside's resource development and economic development but also provides a new direction for the transformation and development of the countryside, which effectively promotes the development of the rural landscape industry (Barney, 2008). Due to its unique natural resources and humanistic characteristics, the country has special site conditions for children's genuine education. The intervention of moral education in the rural revitalization strategy can be used as a new direction for agricultural development to promote rural development further. There are few studies on the planning and design of natural education sites for rural children in China. The construction of real education camps for rural children is not perfect; most are in the practice stage.

Figure 1: Site location and surrounding environmental characteristics

Shijing Village is located southwest of Fujian Province, about an hour's drive from Zhangzhou City and Quanzhou City. It is a suitable transportation distance for children's education camps and is the operating organization of resident camps and day camps. Ishii Village has beautiful mountains and clear waters, and a pleasant climate. The geographical environment is superior, the folk customs are simple, and the industry is mainly based on high-mountain tea picking and tea making. Shijing Village has many sightseeing agricultural places, such as thousand-year-old villages, thousands of acres of

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terraced fields, glaciers, and stone waves, which provide a good foundation for children's nature education camps. This project takes rural children's activity space as the main research object, taking Shijing Village as an example, to design and study the rural children's activity space from the perspective of natural education and to provide new ideas and strategies for the development of rural development and rural children's activity space.

3. Design and planning of the natural education camp project in Shijing Village

This project combines the existing natural and human resources and characteristic industries of Shijing Village, takes the development of children as the starting point and destination, and integrates the educational concept of children's development into the planning and design of "Shijing Village Children's Nature Education Camp." The project site covers an area of about 4.3 hectares. It is a relatively gentle slope and terraced fields between the mountains next to Shijing Village. The entrance of the camp is connected to the village road. There is an idle homestay and several abandoned old buildings on the site. Through on-site visits and communication with the owners, it is planned to renovate and use the homestay to carry the food and accommodation functions of the education camp. At the same time, according to the characteristics of the site environment, the public activities and themed education activities of the camp are integrated. The functions are organized into five modules: the "Ground Expo Lecture Hall" museum and the "Everything Grows" botanical garden, which is oriented to nature learning and displays the unique natural landform and ecological characteristics of the region, and the "GOFARM" interesting farm that focuses on the terraced agricultural experience, inheriting and continuing the local area. The "time-space capsule" humanities museum with folklore features and the extraterrestrial expansion activity module "Glacier Stone Wave" climbing park.

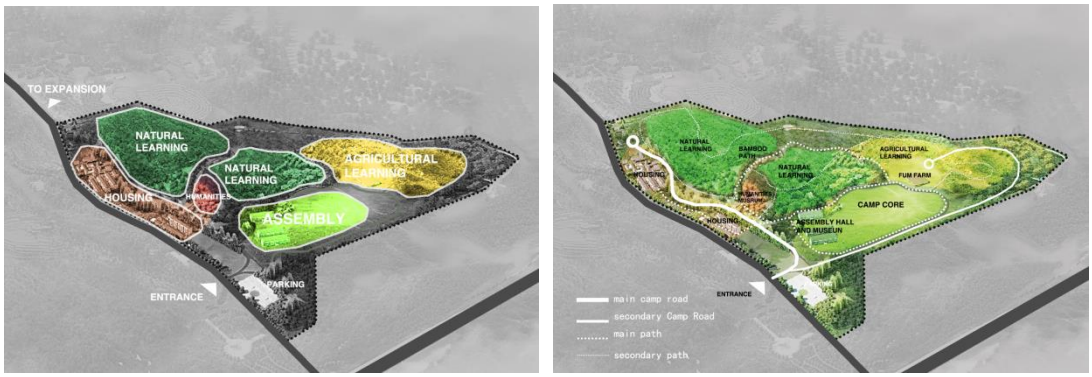

Figure 2: Camp functional zoning and streamline organization

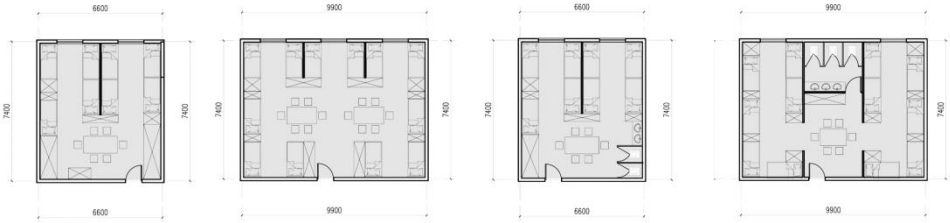

Figure 3: Renovation Strategy of housing unit

3.1 Assembly and Nature learning module: "Ground Expo Lecture Hall" Museum

Shijing Village has a long history. There are many abandoned old houses on this land, but there are also spectacular scenes of "thousand-mu terraced fields." In the design, it is planned to use both to transform the old abandoned houses on the terraced fields into a natural education museum and expand open public space in between. The space not only serves as an open exhibition area of the museum but also carries the centralized public activity function of the education camp. Its open interface facing the landscape introduces the scenery of thousands of acres of terraced fields into the interior space, forming an architectural installation that is co-constructed with the humanities and nature. Unlike traditional museums, the "Ground Expo Lecture Hall" adopts a multi-age and fully interactive teaching method. Combined with the road moving line zoning planning, geographic knowledge can be better popularized. The planning and design of the museum are divided into two areas: science popularization and

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interaction: the popular science field is equipped with local representative terrain and terrain models, and practical experience based on ore elements is carried out in the interactive area, such as setting up interactive games such as "mining" and "mining guessing.", and activities such as "geological evolution" that immerse children in it, realizing a new museum form that integrates viewing, popular science and practice.

Figure 4: Design image of "Ground Expo Lecture Hall" Museum

3.2 Nature learning module: "Everything Grows" Plant Paradise

In nature education, plants are important in children's nature classroom. Based on the base's existing vegetation types and distribution, the Botanical Garden for the Growth of All Things has set up themed learning areas such as forests, birds, and insects. The characteristic bamboo of Shijing Village is used as the main material to create a "quiet bamboo path," forming a coexistence with nature. The artificial shelter is constructed to connect the various themed areas of the botanical garden. To better integrate children into the heart and mobilize multi-sensory activities such as smell, touch, and vision, the interactive part of the botanical garden is divided into fun (such as mimosa), insectivorous (such as pitcher plant), and aromatic plants (such as touch incense). In addition, the terrain design of the botanical garden is combined with the playground in the field of nature education. Considering the safety of plants, a diverse terrain environment is established so that children can truly perceive wild plants and learn about richer natural forms.

Figure 5: Design image of "Everything Grows" Plant Paradise

3.3 Agricultural learning module: "GOFARM" Fun Farm

The "GOFARM Fun Farm" fun farm is set on a relatively flat and open natural lawn. Local materials can be used in farm construction, and local commonly used materials can be selected as the raw materials of the facility (such as wood and stone); these materials can not only meet the functional requirements of the facility but also highlight the local natural characteristics of the site while helping children understand the raw materials. The "Children's Organic Experience Field" is based on the theme of tea picking and farming skills in characteristic local industries. It sets up simulated "teaching places" and supporting facilities such as terraced tea gardens, vegetable drying towers, wheat threshing fields, etc., and conducts attractive and wonderful courses to let children. They are familiar with and learn to do farm work. The Fun Farm has also set up an animal nursery room for children to form the concept of cherishing life; an insect observation area is also set up, and different types of insect breeding ecological boxes are placed. Children can observe the living conditions of these insects up close. Through the fun experience of the farm, children can feel the life process of animals and insects and learn more scientific knowledge.

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Figure 6: Design image of "GOFARM Fun Farm"

3.4 Humanities and customs module: "Time Capsule" Humanities Museum

In traditional areas, the architecture can best reflect the folk characteristics of a place - the humanities museum. The architectural style conforms to the characteristic architectural style of Ishijing Village, without the original architectural form of Ishijing. The building is integrated into the local style and enriches the functions of the local architecture. The design proposes to renovate the old barn on the site to display old objects and image exhibits related to traditional local life, agricultural cultivation, and traditional tea-making craftsmanship, and regularly hold humanistic knowledge lectures, inviting celebrities from different fields to expand other types of children for children. The design intends to retain the shape and basic appearance of the barn, add a wooden platform in the middle and set upstairs connecting the upper and lower spaces to expand and enrich the exhibition space. Through the continuation of traditional local life and human customs, children's understanding of local culture will be strengthened.

Figure 7: Design image of "Time Capsule" Humanities Museum

3.5 Expansion activity module: "Children's Dream Wonderland" expansion area

Terrain can often enrich the way children explore nature. Open soil slopes facilitate outdoor activities (Pyle, 2002). Appropriate slopes and depressions can create a more natural outdoor activity place, which lacks a natural atmosphere, enhances the sense of experience, and can provide safety for children's activities to a certain extent. The expansion area will use the existing fertile terrain site in Fuyu Mountain, where Shijing Village is located - "Glacier Shilang" to further carry out related expansion activities. Children's Dream Wonderland "Parent-Child Interactive Park Shilang" has set up a notice board for participating in rock climbing projects and formulated relevant rock climbing projects. Rules, and detailed instructions for rock climbing, improve children's ability to use their hands and brains.

4. Conclusion

Nature itself is a mysterious and exciting world, and the rural nature education camp is the most effective educational environment to integrate into nature (Beatley, 2011). In rural nature education, children are exposed to nature, explore nature, open their senses of observation, experience, thinking, analysis and creation in a natural environment, experience the beauty of nature, and thus love and actively participate in it, which is to realize the sustainable development of nature education good way. The design and development of rural nature education venues should focus on enriching natural practice activities and creating more opportunities for children to discover and solve problems in nature.

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Due to the particularity of children's education, the design should consider the psychological needs of children. Through design strategies such as age group division and classification of places and facilities, children can form an imaginative sense of open space to relax and devote themselves to getting the most realistic natural experience.

Image source

Figure 1: quote from http://ditu.google.cn, http://www.view.inews.qq.com. Figure 2- Figure7: provided by the author.

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