The anthropocene context of tourism land scapeplanning- the case of tourism ecology planning and design project of Zhi Ao Stone Village, Huanglong Township, Shengsi County, Zhejiang.

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Abstract: The original ecological environment in an absolute sense such as climate, geography, biology, hydrology and others of the earth have been profoundly, thoroughly and permanently altered by human activities. [1] The earth's environment has been constantly changing for thousands of years under human activities, and thus forming the present world environment influenced and created by human being, defined as the new term of anthropocene. In the natural state, the original ecological environment not impacted by human activities is the background of landscape planning and design in tourist resorts. The persistent existence of anthropocene environment formed by human activities can not and shall not be avoided in landscape planning. How to reconcile the conflicts between the two and to find the landscape planning and design mode aligned with the sustainable development of the anthropocene in the original ecological environment? A full analysis of the current situation of material environment formed under anthropocene is required so as to “take its essence and discard its dregs”. With original ecology design as the main purpose, it is aimed to realize the preservation and regeneration of the landscape in anthropocene, explore the unique natural and cultural charm, plan ecological tourist resorts which combine originality and naturalness and fit the current environment.

Foreword

The Dutch scientist Paul Jozef Crutzen proposed in 2000 the new concept of “anthropocene”, a new era in the geological history, which defined the influence and creation of human being as a geological force. Over thousands of years, human activities have imposed interference and impact on most of the ecological systems on the earth. The change of habitat environmental structure and type of land exploitation, as well as the material information formed by human forces manifest that, not exaggeratingly, it is hard to find an original ecological environment on the earth that is not impacted by human activities. The era of anthropocene” has been developing persistently under an irresistible natural force.[2]

The original ecological environment is an ecological feature under natural state, which already exists before change of natural environment by human activities for survival and development. With the development of human society, and advancing of human civilization, the original ecological environment, bearing thousands of years of vicissitudes, and the present interaction between human
and environment, has already been in tatters. Scenes of inharmony loom up on the surface of the earth. We are living in the “anthropocene” environment, facing lots of ecological crisis such as lack of land, air pollution, depleted resources and elevated temperature caused by excessive human interference. In the future, change of development outlook is the only way out for the survial and development of human society.

Landscape, as an ecological form sustaining natural force and human impact constantly changes and interacts. To better reconcile the conflict between ecology and anthropocene environment, our understanding of the interaction between human factors and non-human factors shall be elevated to a wider and more constructive dimension. Take development in tourism industry as an example, rational optimization and exploitation, preservation and management of landscape is the premise of planning the development of tourist resorts. Reconciling the conflicts between development and preservation, and the conflicts between economy and ecology, forming an economical mode of sustainable development of virtuous circle is a key point in planning the tourist resorts. In China, Shitoucuo, Pingtan Island, Fuzhou, is a paradigm of achieving both the development of ecological tourism and keeping harmony with local production and living. In its development, the ecological charm of stone was fully exploited. With the advanced development strategy of excavating the historical, cultural and market value of the old village, and the mode of forming featuristic industry, the old village stepped onto the road of sustainable development while preserving its original ecology, aligned with the concept of ecological development. This mode both increases the economical benefits for the village and promotes the preservation of ecological environment and elevates the living conditions of Pingtan residents, realizing sustained development of human activities under original ecological environment. A developement mode of ecology tourism of virtuous circle has been formed in the village.

To summarize, the direction and strategy for planning and designing ecological environment landscape under anthropocene environment has changed. The concept of “ecological” extends beyond “natural” with “artificial” no longer regarded as destructive. Elastic ecological design is another path of development that also provides economical benefits to the tourist resorts. The project of Huanglong Island, Shengsi County, Zhejiang Province has similar cultural background and strong local ecological features. Facing decreased resources and limitations, the traditional fishery can no longer have sustainable development. Based on such circumstances, transformation becomes the only choice for local traditional economy. Both the original ecology and the reality of local production and living have to be considered in an effort to create fishery cultural tourism and form the economical chain of ecological tourist resort with original ecological style.

**Project Background**

Huanglong Island, locatd in the east of East China Sea is a rugged archipelago in Shengsi Islands. With a land area of 5.51 KM2 and its sublime mountains, bare rocks, and brownish mud, it is named by its shape which resembles a yellow dragon resting on the sea. Zhi Ao Village, located in Huanglong Island, is surrounded by sea in three directions, and features exotic rocks and reefs. The island is famous for its gold-ingot-shaped stone called “Cloud and Draon in East China Sea”.

![Fig.1, Shitoucuo, Pingtan Island, Fuzhou](image1)

![Fig.2, Huanglong Island](image2)
sea fishery work under natural conditions and hazardous working environment form the unique way of production and wisdom of the local fishermen. Emotions linked to the sea, imbued with faith, morale, sentiment and value of the fishermen created traditional activities such as Sacrifice Offering to Sea, Fishing Opening Day and Zhoushan Gong and Drum, etc, which lay the foundation for a classical ecological fishing village.

Huanglong Island, is an island closest to the Shengsi Island. Its natural landscape, relatively well preserved fishing village life style and relatively well preserved stone house belts in Shengsi Archipelago, tourist site of gold-ingot-shaped stone, abundant non-material resources of fishing village combine to create its unique attraction to the tourists.

The problems: transportation in Huanglong Island (ships for tourists and boats of the local residents not separated), fading out of the overall image of traditional stone house belt of the island, lack of systematic arrangement of tourism routes, lack of relevant tourist facilities (service center, map, pension, cultural and commercial activities), lack of tourist features, lack of tourist related business.

The project design of this phase includes two parts: A) Developing and arranging the one-day line with Zhi Ao Stone Village and Gold-ingot-shaped Stone as main sites; B) Ecological tourist resort mainly consisting of the natural reefs and rocks of Chibo Mountain. Each part consists of a string of sites reflecting local ecological features, forming a platform that maximally preserves the original ecological environment and elevates the standard of living, production, entertainment. The concept of local ecology is highlighted in the design. While preserving the current geological feature and traditional customs, it also highlights continued preservation of ecology and environment to serve the naturalness. The design aims to align the new plan to the local customs, culture and environment, to ensure that the theme of ecology is fully embodied, and local culture is reflected, impressing tourists with strong folk culture. Meanwhile, novelty is also embodied in the design, to mix the life style of modern people with the ecological fishing village. It aims to remain loyal to the special feature and keep distance from fashionable practice. Eventually, the picture of local ecology is drawn by combining landscape, festival, customs, entertainment and fishing, forming the chain of accommodation, catering, production and sales to boost local tourist economy, to complete the design of the tourist resort which solves development problems by ecological design.

**Design Strategy**

Highlight the importance of the concept of local ecology in the design of landscape in tourist resort. The functional and ecological features of the landscape in tourist resort are not mutually conflicting, or mutually repelling. Through reasonable design and coordination, it is possible to balance the relationship between human and nature in the resort, thus making the design more humanized. The most featuristic view of Zhi Ao Stone Village is its stone house. This project, mainly aimed at having a taste of the charm of stones, aims to promote local culture so as to boost its spreading and development while introducing natural landscape. Chibo Mountain is a natural tourist site mainly
formed by natural reefs and rocks. The design, apart from serving the nature, ensures that the linked sightseeing platforms and trails are in harmony with geological features, so that the ecological environment is preserved while sightseeing functions are added. Design of both sites are based on naturalness. Local ecology is the highlight in the design of the resort, aimed at interaction and achieving harmony between human and nature.

It aims to keep the existing site elements in the scope of the design, and re-use the existing materials, and enhance preservation. Development shall be guided by and based on preservation to realize sustainable development of ecological environment. While focusing on the economic benefits, social benefits and nature benefits, the design of the landscape in the resort sticks to the concept of building ecological tourist resort. In the design, we add viewing platforms, propose repair of trails and create featuristic sites, etc. The ecological design is to build featuristic landscape of tourist resort with the ecological concept, utilizing local materials, techniques, nature and culture. Such ecological design embodies the design strategy of focusing on original ecological environment.

Promoting the economical development of local community and increasing the income and living standard of local residents are important functions of ecological tourism. Active participation of local residents in the planning of the tourist resort helps to make the planning practical and acceptable to local residents. A) in the planning, it is proposed to renovate some local stone houses to serve as pension for visitors, which means sharing interest with local residents, while re-utilizing local old buildings and preserving culture. B) The humanistic view of “knot” is proposed in the project. It is based on variations of knots in the traditional fishery work and the techniques and handicrafts of knitting fishing net. This is aimed at creating the knot culture and promoting local humanistic tradition.

The tourism industry is a complicated and inter-related multi-level, multi-dimensional, and multi-element system. The planning of the ecological tourist resort shall follow the principle of combining macro and micro aspects. Functional sectioning for the resort shall be conducted based on the resource situation and visitor information of the resort. The actual situation shall be considered and the ecological principles shall be fully embodied in the planning of the infrastructure of the resort.[3] The designers of the project conducted substantial surveys on the situations in Huanglong Island, taking into consideration of the needs of the local tourism and construction authority and residents of Zhi Ao Stone Village, before starting their overall planning and designing of the ecological project with macro-to-micro approach, which covers accomodation, catering, production and sales. Different from that for ordinary tourism resorts, the planning and design for this project embodies solution to development through ecological design.

Fig. 5, Huanglong Island Tourism design status
Conclusion

The era of “anthropocene” and the environment in this era has become a reality and an irreversible natural status. Facing this unprecedented challenge, if the designer mistakenly regards ecological design as restoring environment or restoring to the status of low human interference, viewed as an effort to preserve ecology, such opinion is in fact obviously short-sighted. Mere restoration of environment with big investment, although seemingly solves the environmental problems, will bring about conflicts between the new environment and the production and living of local residents. This is not a qualified mode for harmonious development. We need to face the fact that the ecological system on earth has already been interfered and changed, understanding the current situation and the upcoming challenges. Mere restoration is not our purpose. Regarding the strategy of planning landscape, which balances original ecological environment and sustainable development in anthropocene, we use our wisdom to seek an adaptable new approach to solve practical problems and rejuvenate the ecological charm of local environment. To be specific, in the materialistic environment and era of high level human interference, we resort to ecological design in planning landscape, to reduce damage to natural resources by human activities and perform ecological restoration to the landscape with differentiated and customized design strategy. This is a way to gain economic benefit for tourist resorts for sustainable and effective development.

References: