Rural Design Ethics Based on Four Dimensions

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Abstract. China has a large rural area with a large population, whose architectural features, natural landscape, organizational structure and industrial structure are very different from that of cities. In the past, the contradictory between city and rural areas in China had negative effects on rural construction, resulting in a slow development. The excessive focus on city design has led to the neglect of rural design. Blindly using the concept and method of city design to renewed the countryside is a kind of destruction to the countryside, and also wastes a lot of construction resources. Design is influenced by ethical concepts, which needs to pay more attention to the culture tendency and society. Urban design makes theoretical investigation aiming at the ethical questions that emerged from city, then summarizes the design strategies of the city. While Chinese rural design has only begun to enter people’s horizon, and there is very little discussion about it. Due to the lack of ethical value guidance, Chinese rural design and construction has many problems at different levels of ecology, culture and industry. Therefore this paper primarily explores the domestic and foreign design ethics, attempting to provide a new perspective for Chinese rural design, aiming at finding a realistic and forward-looking solution for Chinese rural design concerning to the complex relation between city and rural areas.

1. Introduction
The process of urbanization in China intensifies the decline and disappearance of traditional villages. Therefore, it is urgent to strengthen the protection and development of traditional villages. In view of the prominent contradictions and drawbacks in the rural construction, it is necessary to guide the village construction with the design ethics. This paper hopes to reflect on the historical reality from the perspective of design ethics, learn from the current situation of domestic and foreign country design research. However, due to the domestic and abroad research on the traditional village design ethics has just started, there are many problems to be solved in theory and practice.

Most foreign rural villages have experienced the development process of city and rural conflict, so that a considerable amount of experience had been summarized in theory and design methods, which provide reference for China’s rural design.

Domestic scholars are very concerned about rural issues, but they may lack a comprehensive, in-depth and objective judgment, whether they are in rational exploration or practical exploration. The contradiction of urban and rural binary opposition has yet to be alleviated, so in the face of the issues, such as rural cultural destruction, the ecological environment destruction and lagging economy, we must establish a kind of design concept based on ethical care, and then from the ecology, the industry, the people’s livelihood and the spirit dimension, we have to make the strategic thinking for rural design at present and in the future.

2. Abroad Research Status

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In foreign country, design ethics has always been a very important issue. From the strong democratic thought of Bauhaus to Victor Papanek’s design philosophy morality in Design for the Real World (1985) and then to the current concept of ecological design, as well as the concept of sustainable development can be summarized as some certain ideas repetition. Although, these theories have been discussed in depth, but there is no more profound expansion. All of these studies mainly aim efforts at criticizing city design, which talk less about traditional village design and ethics in the correspondence and the feasibility exploration of development of traditional rural design ethics.

At present, the study of the rural design ethics can be divided into four aspects:

2.1. The justice of rural environment
There are series of books refer to design justice such as Justice, Nature and the Geography of Difference (Harvey 2010) [1], Design for the Real World (Papanek 2016) [2], Environment Ethics. Duties to the Value in the Nature World (Rolston 2012) [3]. They comprise the environmental space, society, political and culture, and emphasis the living crisis of peasants caused by ‘design injustice’. Papanek especially mentioned that design should be served for weak group. As a statement of equality, his consideration focused on social disadvantages of traditional villages.

Arendt and Brabec (1994) [4] mentioned that one-sided emphasis on industrialization was not the best choice in efficiency or fairness, and the scientific and comprehensive plan of rural area was the best choice for the countryside to get overall development. These researches mainly discussed the role of design in the social context from the perspective of ethics. They distinguished the rural design from city design, gave rural construction more impartiality and humanity thinking, and reflected deeper consideration of practice subject on traditional village.

2.2. The ecology of rural design
Architect Paolo Soleri combined Ecology with Architecture to establish a conceptual framework for "Ecological Architecture". (Olgyay et al., n.d.) [5] he put forward that architecture design should coordinate with regional geography and climate. (McHarg 1994) [6], raised an idea that people, architecture, nature and society should be coordinately developed. He explores the effective ways and methods of ecological architecture in rural design, which pays more attention to save energy and protect natural environment. The above theory discussed the sustainable design development from the design ethics’ perspective. In addition, the practice of rural construction abroad focuses on the combination, neither design nor natural itself.

2.3. Rural design responsibility and moral transmission
Whiteley (2012) [7] emphasized designer’s responsibility. Jonas (2000) [8] researched on the social responsibility of designers from the perspective of professional ethics. In 1987, American designer Ronald L. Mace began using the concept ‘Universal Design’ in large numbers, his point of view highlighted the moral transmission of design. In addition, rural construction practice has succeeded in foreign countries such as the ordinances of rural design promulgated in England, the rural community planning in Germany and the eco-village organization formed in Denmark, which emphasized the importance of design responsibility in the construction and protection of villages. The rural design practice in foreign countries concerned positive change in village, and how to convey moral education in design.

2.4. The economic value of rural design
Arendt R, in his works, talked extensively about the important influence of rural design on regional economic development, and rural design must include present situation of land resource using in this areas, as well as economic requirements of future development. (Gallent, n.d.) [9] they introduced the economic, community and landscape challenges faced by rural planning. He investigated the relationship between rural planning and rural economic affairs, and considered the inseparability of economic changes and changes of rural society and environment.
Foreign rural design explored the ways how to meet the economic requirements through designing village space, and how to deal with the conjunction of rural construction, sustainable development and regional cultural protection.

3. Domestic Research Status
In the drawbacks view of the traditional village construction under the impact of urbanization in China, the domestic scholars also discussed practical necessity of ‘design ethics’.

Studies on the design ethics of domestic village constructions and protection mainly signalize in the following points:
- The design of modern technology localization. Namely, the design not only satisfies its modern functionality, but also maintains the traditional geographical and cultural characteristics.
- Respecting ecological environment includes the ecology of nature, culture and humanity.
- The reconstruction of value system: design injects norms and ethics into objects. Therefore, the “ceremony” and “morality” reflected from design penetrating into rural life will inject new vitality into rural areas. In essence, the "ceremony" designs the ethical entity and stipulates the relationship between people, reflects the ethical spirit of the individual returning to the entity.

Figure 1. Domestic and international research reviews structure chart

The relevant researches at domestic and foreign research confirm the possibility of introducing ‘design ethics’ which emphasizes spatial justice, ecology, social responsibility and economic value into rural construction layout, however, there is a need for further research. First of all, there is no standardized design theory to guide the current rural constructions; secondly, the fundamental task of rural constructions should be cultural construction and the function of design ethics to the village culture cannot be ignored. Finally, the idealization of the relationship between design ethics and designers is confused. Therefore, further analysis should be carried out on economic and social context of ethical practice. Thus, a research on rural design ethics is in urgent need. As show in figure 1.

4. Four dimensions of rural design ethics
Rural areas are difficult to be a sustainable and updated entirety because of the lack of systematic theory and practical guidance, which brings about lots of problems in rural constructions. Aiming at the problems of homogenization and roughening in rural designs, the thesis systematically analyses the theoretical guidance to the overall design in rural areas through four dimensions.

4.1. Ecological dimension:
In the process of urbanization, the extensive economic development model leads to the shortage of ecological ethics in rural areas. The developmental pattern of ‘getting rich first and then dealing with
the pollution’ obtains economic benefits at the cost of environment, which results in the waste of material resources in rural areas and lots of rubbish that is difficult to be decomposed in a short time. Furthermore, the obsolete production and consumption concept, as well as the insufficiency of ecological consciousness of farmers lead to the destruction of ecological environment in rural areas. For example, many farmers bury or burn the discomposed domestic garbage without any environmental treatment and use excessive chemical fertilizers and pesticides. To solve the problems above, firstly, we can improve villagers’ ecological and environmental protection awareness by learning their daily life and farm work habits. Then, in order to maintain the regional architecture characteristics as far as possible on the basis of respecting the original local ecology, rural environment can be changed by the means of ecological design and appropriate technology, as well as any other related approaches. Lastly, we must promote the ecological values of sustainable development and never drain the pond to get all the fish in the process of economic development. Meanwhile, the emphasizing on the balance mechanism of rural development and the rural ecological ethics projection to society, economy and culture can provide value guidance of ecological ethics in the constructions of beautiful countryside.

4.2. Industry dimension: To coordinate development between city and rural areas, we should change the dual economic structure in the countryside and the cities. The process of urbanization in China has led to a large number of rural human resources and material resources output to big cities, and the imbalance of rural industrial design has exacerbated the problem of rural hollowing. In rural constructions, industrial development is the fundamental driving force to promote the modernization process of rural areas, and also is the material basis of rural construction and development. At present, the rural complex formats have influence on the diversification of rural production mode and many aspects like rural population base, living standards, housing construction and infrastructures etc. Industrial dimension, based on respecting for cultural attribute and regional characteristics, upgrades the rural industry chain through the packaging design of agricultural products, handicraft products design, and consumption space design to create the industry platform with rural characteristics and boost the economic development.

4.3. People’s livelihood dimension The dimension of people’s livelihood is the dynamic representation of village design ethics. It pays attention to public service security facilities like rural education, medical, transportation, energy, cleaning and the governance mechanisms in line with its own characteristics such as rural community and rural autonomy. The dimension of people’s livelihood attaches great attention to the cultural protection of traditional villages, and provides the ethics guidance to the modern life style, appeared in rural areas, as well as critically inherits the traditional values and customs, which represents the concentration in the rural construction of the living environment and life quality.

4.4. Spiritual dimension: Spiritual dimension is the core connotation of village design ethics. The stability and closeness of Chinese rural areas enable the traditional context with regional attributes to be preserved, and both have certain ethical enlightenment content. For example, the ethical and spiritual belief space like the village’s clan temple, genealogy, inscriptions, nave, ancestral temple, simple shrine continually educate people through worship gods and their ancestors. Public order and good customs of the village help to constraint villagers’ behaviour. The villagers’ self-confidence in village culture helps them consciously undertake and inherit the parental guidance and proverbs and regard them as rural value standard. The backwardness of rural development has led to the backwardness of farmers’ values, and the rigid rural life causes the decline of farmers’ personality, likewise all kinds of ideas updates slowly lead to the lack of an active humanistic impetus.

From the spiritual dimension, rural design extensively studies the history, culture and customs of
countryside, and penetrates regional cultural spirit into the rural landscape architecture and daily life by the means of design, which takes the historical responsibility to continue of rural cultural value.

5. Summary
The rural design ethics abandoned the design mentality of simple visual sense and sensory stimulation to pursue the comprehensive design in ecology, industry, people’s livelihood and spirit, so that the ethical significance of rural design has a broader meaning. As show in figure 2.

![Figure 2. The key words of rural design ethics in four dimension](image)

In the process of rural construction, designers must consider people how to live in ethical way and obtain a space for rural further development in all aspects by the means of design. In this way, village development will turn into an updating and sustainable organic integrity through the four dimensions.

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