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A study on the pattern of sustainable development for rural settlement in contemporary China

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Abstract:

During the long preindustrial times, buildings in China were normally built to adapt to the local social and environmental situations, and their ingenious designs and high diversity have become an infinite treasure trove keeping contemporary architects inspired. However with a booming economy since the 1980s, the bond between new residential buildings and the environment is disappearing in Chinese rural areas. Concrete blocks and multi-storey flats, which have been mass-produced in the urban area, are simply copied into the villages without respect to the local context. Universal design on housing projects transfers the strong local identification into featureless barracks. Behind the mask of an orderly and tidily built environment, what has been lost is the soul and essence of rural life, which is a deliberate deletion of social sustainability.

Based on this situation, this paper tries to explore a potential harmony between modern countryside construction and local characteristics in contemporary Chinese rural areas by looking into case studies from north China. The paper would pursue the influential factors on the patterns of sustainable development for rural settlement by analyzing the historical evolution on physical environment and social changes on demographic development, which results in an attempt of building up a framework of patterns for sustainable development of rural settlement in contemporary China.

Introduction

The contemporary China has experienced remarkable raise since 1980s'. One of the most obvious symbols of the development is a boost of gigantic metropolitans. However, sacrifice on rural area, where most of the population still live in, was very high price for this prosperity. During the fast economic growing, cities were given priorities, which made social, economic and environmental situations in rural areas far behind. In order to resolve the problem, Beijing is intent on building a new countryside to make people of rural areas have same living condition with that of urban areas (Meng Fuqiang, 2009). Honestly to say, these efforts have made various positive changes, either on economic, social, cultural services or on the physical built environment. Nevertheless, the rows of brand new buildings have changed the rural settlements a great lot, and in return, lost their local identifications and traditional characteristics. Many reasons can be argued to response for this outcome but lack of relative planning policies could be the significant one.

The historic change and planning in rural area of China

Rural area is one of the vital characteristics of China. In thousands years history, not only did the agriculture support the Chinese civilization but also most of the population were closely farm-land bound. This situation hasn't been changed much in modern China. Till 2001, China still has 989 million people who lived in 3,458,852 villages, which covers a vast part of the country (Luo Zhongzhao, 2008, p.6). But surprisingly, this huge part didn't attract much attention until 1980's and this led to a general poverty compared with the cities. National policies were unilaterally enacted to give opportunities for urban development. Not only have the majority of national resources been preferentially distributed towards urban areas, but also the natural resources of rural areas are predominantly assigned to the construction of metropolises. This unfair situation has become increasingly serious and severely obstructed the development of the county, and has resulted in a bipolarization in society. Given this unbalance, the government issued 12 No.1 documents in trying to solve the problem since 1982.



Figure 1, The poor environment in rural area, by Sun Zhaoqing

The No.1 document generally illuminated the most primary yearly policies, which is directional for the whole year's work (Qu Shengwen, 2010). Five were published from 1982 to 1986. They contributed to break the planned economy system meanwhile to construct a new framework of market economy, which dramatically aroused the people's motivation of changing poverty stricken status. However, although farmer's income has been increased, the rate of growth is far behind that of oppitans, which made the disparity between urban and rural area even wider. This situation alarmed Beijing. In November 2002, the government set out another ambitious plan of constructing an all-around prosperous society.

Between 2004 and 2010, seven No.1 documents, which aimed on balancing urban and rural development, were issued to specify the significant tasks of production development, well-off life, rural custom & civilisation improvement, clean & tidy villages, and democratic management. Hereinto, the key criterion is building a new countryside with stable progress on infrastructure and all social factors, which certainly indicates new built environment.

At the beginning of 21st century, China has gathered a good amount of national wealth. So compared with 1980s', the government could invest more money to reconstruct villages. However, when many villages were going to undergo great changes, the relative planning policies have been ignored. This soon led to a tendency of mass-demolition-mass-construction. Subsequently, without careful consideration, planning policies of city was roughly applied in rural area and it was generally accepted that building a new countryside was simply to duplicate the architectural language of cities. Soon after,

what we can see in many new villages were the rigid parallel roads with barrack-like accommodations, or even worse – the multi-rise apartments. Instead, the flexible landscape, the meandering river bank, the diversiform village squares, and the labyrinthine alleyways, all these rural treasures, have disappeared forever.



Figure 2, The new urban-like village, Hou Pubang Village, Tianjin,

<http://news.enorth.com.cn/system/2008/06/30/003475165.shtml>, [Access date: 07/08/10]

In fact, this problem has been noticed long time ago among western academia. Lefaver (1978) explicitly said: “*planning for rural areas demands a new framework and tools which would be quite different from those used in urban planning...*” (quoted by Cloke, 1983). Apparently, despite rural area needs specific planning policy, this valuable experience has been regrettably set behind economic growth in China before, which resulted in the urgent demand on rural planning guide.

However, in china, the vast territory covers extremely high diversity of geographical situations and weathers, and this variation on natural environment intrigued a high diversity in countryside. On physical aspect, Chinese villages may contain hundreds of different architectural styles; on social aspects, more than 56 different ethnic communities live in rural area with diverse customs. This condition decides that any general policy of rural area in China should reflect the most common characteristics within the extreme complexity. For instance, the official definition of rural area in China has followed the common attribute of economy – “*These areas rely on agriculture, consisting of various farms, timberland, horticulture and vegetable production, etc.*” (Liu Haoxing, 2008). Therefore, for the tangible part of villages, other common vocabulary must be uncovered. In 1978, the British representative at the Vienna Meeting of European Planning Ministers suggested that: “*Certain*

aspects of the pattern of rural living need to be safeguarded as an alternative to the urban pattern of living." (Planning, 1978, 4) In this statement, potentially two points – ‘pattern of rural living’ and ‘preservation on them for future’ can be extracted, which could stand for two entrances in the common vocabulary of rural planning – pattern and sustainability.

Patterns in rural area

In the built environment, no one could be more important than Christopher Alexander (1977) to discuss the concept of pattern. In his masterwork – *the Pattern Language*, Alexander defined that *“each pattern describes a problem which occurs over and over again in our environment, and then describes the core of the solution to that problem, in such a way that you can use this solution a million times over, without ever doing it the same way twice”* (Alexander, 1977, P11). Among his 253 patterns, many related the rural area on different scales. Actually, patterns are ubiquitous in the diverse Chinese countryside. Many native scholars have noticed the importance of rural patterns and their efforts could be purified into four significant rural patterns.

First, Fang Ming, one of the chief planners in the China Architecture & Research group, put forward his viewpoint about rural planning – *“To preserve, inherit and discover the original natural texture of villages, and to follow these natural texture and historical characteristics as much as possible in the new planning...”* (2006, p.20), which could be refined as “the original context”.

Second, Li Li, a Scholar in Tong Ji University, argued that the traditional spatial characteristics of village was controlled by certain interior regulations of the composition of accommodations, farm lands, forests, rivers and roads, etc. What the mass-demolition-mass-construction could create is soulless products in spite of their smooth road structures and nice landscape (2007). This viewpoint can be summarized as “the original spatial structure”.

Third, the famous anthropologist – Fei Xiaotong – put forward the significant concept of “Jia” (Family) in his masterwork – *“Peasant Life in China”* (1939), and highlighted the importance of the units of family in Chinese rural area. In 2008, Luo Zhongzhao, the chief architect in the Beijing Institute of Urban Development, argued that the tradition of family has dramatically influenced the composition, architecture and organization of rural areas. This phenomenon has created a harmony between nature and human in the past and is invaluable to study for the current planning. This point can be extracted as “the original social unit – Jia”.

At last, Feng Jikai, the vice-chair of China Federation of Literary and Art Circles, pointed out that the Chinese rural communities have their own fine art, literature, architecture, music, dancing, opera, language and many other vernacular cultures and skills. This is a valuable heritage and shouldn’t be annihilated in the process of reconstruction. We have lost the personalities of cities in the rapid construction and cannot afford another loss in rural area. (quoted by Liu Haoxing, 2008, pp.177-178) This focuses on “the original life style”.

Credibly, all these four patterns, like Alexander said, may happened millions times in millions of Chinese villages, with millions different forms but same essence.

Although many new villages have been reconstructed without respecting the previous patterns, some scholars do have notice the importance of local patterns and tried to design new village with them. The reconstruction of Xiaobao village is one of the clever prototypes. This village with 705 families, located on the east suburb of Beijing, was designed by the Beijing University of Technology. The planners tried to regenerate the environment and landscape but keep the original pattern as much as possible. It is clear to see, the layout of old alleyways, the original house and old cross way has been preserved, but brand new language of architecture has been applied to revise the atmosphere. Indeed, it is arguable that some design techniques is still too “urban”, however compared with other reconstruction projects, this approach of rehabilitation was a valuable try and should be encouraged.(Fang Ming, 2006)

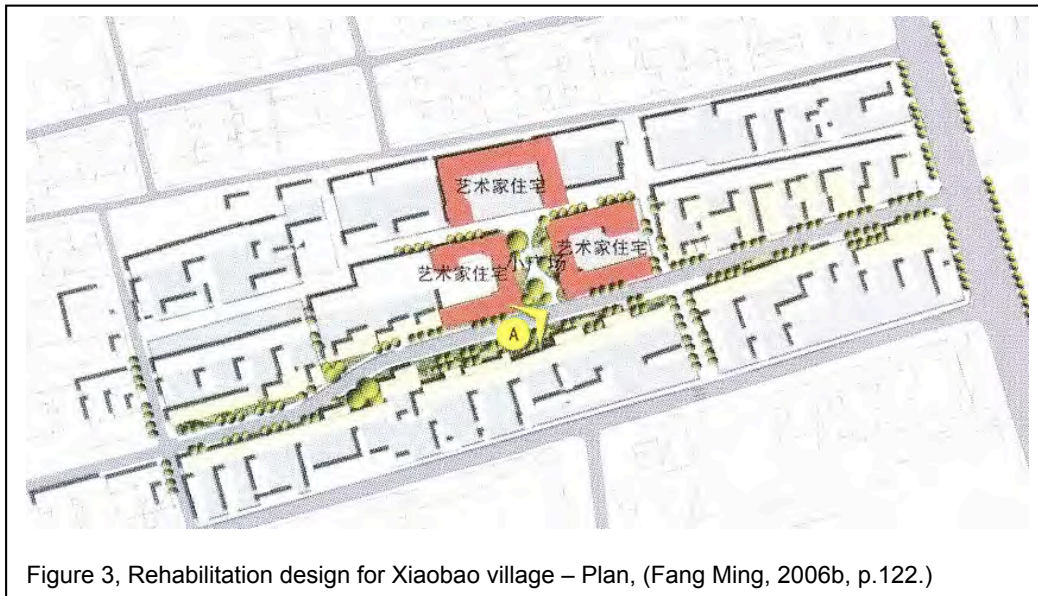


Figure 3, Rehabilitation design for Xiaobao village – Plan, (Fang Ming, 2006b, p.122.)



Figure 4, Rehabilitation design for Xiaobao village – Cross Way, (Fang Ming, 2006b, p.122.)



Figure 5, Rehabilitation design for Xiaobao village - House (Fang Ming, 2006b, p.123.)

Sustainable patterns in rural area

In the new millennium, the United Kingdom has combined the pattern and sustainability together to guard her remarkable beautiful countryside. In the most updated Planning Policy Statement 7, Government's Objectives has been clarified:

“To promote more sustainable patterns of development:

- focusing most development in, or next to, existing towns and villages;*
- preventing urban sprawl;*
- discouraging the development of ‘greenfield’ land, and, where such land must be used, ensuring it is not used wastefully;*
- promoting a range of uses to maximise the potential benefits of the countryside*

fringing urban areas; and

– providing appropriate leisure opportunities to enable urban and rural dwellers to enjoy the wider countryside.” (PPS7, 2010, p.6)

Clearly, the social sustainability, which aims to preserve the original patterns of local context, culture, life style and natural beauty for future generations, has become legislatively imperative for the UK government and has become evenly important with the energy-efficient sustainability. However in China, as discussed before, without enough respect on the original patterns, the meaning of sustainability has mostly focus on the later rather than the former in rural reconstruction.

Gua Jiayu is a typical result of this unbalance between the ideas of social sustainability and energy-efficient sustainability. The small village located in the northeast part of Beijing. With surrounding mountains and rich historical remains, this tiny village faced up to both the opportunities of great natural and historical environments and challenges of poor infrastructure and transportation. Recently, this village has undergone a thorough reconstruction. Dramatically, all old layouts were totally wiped off and a brand new village was constructed with identical sustainable technological equipments. Honestly, the sanitary situation and infrastructure have been much improved and the material life of the villagers is not much different with that of the city. However, walking in the tidy but stiff pedestrian way, people with full pocket may more or less feel a kind of empty – an empty on the part of social sustainability, which indicates the lost vernacular patterns.



Figure 6, Sustainable houses in Gua Jiayu village, Beijing

<http://citylife.house.sina.com.cn/detail.php?gid=57420>, [Access date: 01/08/10]

Conclusion

Summarizing the discussion above, it is interpretable that the time to consider a rural planning policy in China has come. With the 30 years economic growth the country has gather enough strength; with theoretical supports the government can avoid unwanted obstructions. In fact, both the concepts of Pattern and Sustainability are rather globalized and beyond the difference of political systems. It is arguable that they could illuminate a bright future for the rural area planning policies in China.

Therefore, based on preserving the framework of four critical patterns, China's planning policy of rural area could emphasize both the social sustainability and energy-efficient sustainability, for a traditional, clean and convenient countryside. (2036 words)

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