Design Power and Social Innovation

Exploring Design Practice Method Based on

Network & Community

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Abstract

In this study, we observed people in the context of communities instead of people as individual. In reference to research methods and results in sociology and anthropology, we took Pingtan Village in Tongdao Dong Minority Autonomous County as the research object, and carried out a rural community transformation practice using design-team participatory approaches. We aimed to explore proper approaches for designers to participate in social innovation and possibilities for designers with different backgrounds to work together efficiently.

According to the "power theory" of Michel Foucault and the "local knowledge" discourse of Clifford Geertz, we argue that designers need an appropriate structure (design power or ability to drive social innovation) in the process of social innovation. Relatively, the construction of "knowledge platforms" and "organizational design" is much more important than the actual design outputs. Design will use a more tensional structural form and social identity power (innovation networks, design networks, social networks, etc.) to participate in community social innovation, making web-based and sustainable harmonious community possible.

Keywords: social innovation, design power, knowledge platforms, organizational design, community

1. Introduction

Pingtan Village in Tongdao Dong Minority Autonomous County is filled with wild life and historical artifacts. However, it is one of the poorest places in the country due to its lack of economic development. How to access to development opportunities with its cultural and resources strengths under the premise of maintain the harmonious life of local residents is the goal of social innovation in this area. Hunan University and Beijing Nokia Research Centre launched "New Channel" Design & Social Innovation Summer Camp there in the summer of 2009. "Channel" is the English translation of the Chinese word "Tongdao". We gave the name "New Channel" to refer to the hope that our design would bring new opportunities for the area, and also the new approach for design to participate in rural social innovation.

2. Social Needs

The Young Foundation defined social innovation as "new ideas that work to meet pressing unmet needs and improve people's lives" (Mulgan, 2006). The description of social needs contents is the starting point of rural social innovation. Eduardo and Simon argue that social innovation should benefit to the majority (Pol & Ville, 2009), which became one of our major standards to filter social needs.

Participatory Rural Appraisal (PRA), Social Impact Analysis (SIA) and methods in field study, including direct observation, participant observation, unstructured interview and focus group, were used in defining social needs contents in New Channel practice. We summered these social needs in two categories.

(1) Lifestyles and ways of living

Landscape: protect as well as develop landscape and architecture;

Furniture: enhance with local products and traditions;

Culture and nature as business resources for the local benefit.

(2) Way of connecting

Families - how to maintain connected the families when some goes to work far away or move to the city;

Economy - connect the rural with the urban capital;

Culture - how to use local traditions to continue the harmonious cultural ecology.

3. Participatory Approach

According to the social praxeology of Pierre Bourdieu, power analysis of Michel Foucault, and local knowledge theory of Clifford Greetz, design can be considered as social practice or actions of creation, which needs a combination of a structure (power, which Michel Foucault sees as "a complex strategic situation in a given society social setting".) to implement. So, we also need to consider the relationship in sociology between structure and action, the subject and structure, social and individual, social cultural and social practice.

In essence, designers' role is still random when involved in the process of community transformation. In the complex relationship among community institutions, designers are just a grassroots force, and most of the time, are actors of servicing. So, it is worth considering the fundamental methods for designers to involve in social practice.

On one hand, designers often participated as "outsiders". In the confrontation movement of various kinds of unbalanced "power" and "capital", they cannot obtain an essential structure form to involve. Therefore, in the process of community-based design practice and social innovation, "construction of knowledge platform" and "organization design" might be a viable approach for designers' participation.

On the other hand, how can designers get the "local knowledge" and creatively promote social innovation in a native's point of view with a different "paradigm" from other subjects? It also calls designers to re-examine the working methods fundamentally.

Post-structuralism assumes knowledge to be a kind of power. We can't avoid introducing new design knowledge when involving in social innovation. However, when we intervene as bystanders, we cannot try to change the local residents' collective memory according to our own preferences. As Geertz described, we can use thick description to interpret other's interpretation, to get local knowledge and achieve a deep understanding of the cultural phenomena. Only when the overall local "Grammar" is got and understood, designers can avoid bias and promote social innovation in the native's point of view.

In all these process, designers can get the right power through construction of knowledge platforms and organizational design. Meanwhile, the using of participatory methods, such as PRA (Participant Rural Appraisal), will reverse the power between designers and local residents, which means enabling people in the social innovation process.

4. Knowledge Platform and Organization Design

4.1 Knowledge Platform

The construction of knowledge platform is the power gaining process for design, and also the basis to involve other creative forces and enable interdisciplinary cooperation. In our design practice in New Channel, the knowledge platform contains both all forms of local assets and our interpretations on local knowledge. Network is an important tool for building knowledge platform.

John Kretzmann and John McKnigh argued that only asset-based community development could help us escape from the needs-driven dead end (Kretzmann & McKnigh, 1997). David Boyle, Julia Slay and Lucie Stephens also emphasized the importance of building on people's existing capabilities (Boyle, Slay & Stephens, 2010). These ideas inspire our innovation practice in rural communities in two aspects: on the aspect of concept, we should not be limited by the social needs, but create from the asset-based point of view; on the aspect of practice, building knowledge platforms is an effective basis for social innovation. We defined local assets as three types: cultural assets, natural resources, behavior resource.

4.2 Organizational Design

When it comes to organizational design, we have to face one question: who are the social innovation actors?

In the report of Danger and Opportunity, Robin Murray pointed out that new social economy would appear in four sub economies: the state, market, the grant economy

and the household; and more social innovations would straddle the boundaries between sectors and disciplines (Murray, 2009). In his description of social innovation, Ezio Manzini mentioned that "social innovation is a process of change where new ideas emerge from a variety of actors directly involved in the problems to be solved: final users, grassroots technicians and entrepreneurs, local institutions and civil society organizations" (Manzini, 2009).

According to these ideas, we summarized actors in rural social innovation as the government (state), NGOs (the grant economy), companies (the market), local residents and other grass roots institutions (the household).

Government: the Young Foundation called big organizations, governments, companies, or big NGOs, as "trees" as they have the resilience, roots and scale to make things happen (Mulgan, 2006). In rural social innovation, government has capital and power of policies to create a tolerant environment and scaling social innovations. However, in case government is involved in social innovations, participatory approaches need to be more seriously emphasized to guarantee innovations from the beneficiary point of view, and avoid the traditional top-down concept of community development.

NGOs: Non-governmental organizations have the same organization and financial advantages as government. But the problem for NGOs social innovation is that it is very difficult for regions that need help eagerly to access the information because of their extreme lack of linking social capital. The capability to get that information has limited the communities that are able to obtain the support. Those far remote rural areas that need their help most have the weakest capacity to get these resources. Thus, connecting NGOs and the rural communities becomes an important social innovation content.

Companies: Companies participate in the social innovation process through corporate social responsibility and providing innovative products and services that meet social needs. Social enterprises are an effective organizational form of social innovation, and also important actors to apply social services.

Local Residents: They are the ones who are enabled with power and information and determines to what extent social innovations will be successful.

Grassroots Institutions: Design is one of the key parts. The Design Council argues in Transformation Design, that designers are uniquely placed to solve complex social and economic problems, not only to design products and services, but more importantly to use design knowledge to integrate variety of sources to form an effective outcome (Burns, Cottam, Vanstone & Winhall, 2006).

Partners			
	Company: NRC Beijing >Information Design Knowledge >Funding Local Wood Related Companies	>Local Knowledge >Power of Creation	Grass Roots Power - Design >Design Knowledge: Architecture,Movie,Music, Industrial Design,Graphic, Environment

Fig. 1: partners in new channel design & social innovation summer camp

5. Design Contents

Social needs and knowledge platforms determine the organizational structure of social innovation and design contents.

In New Channel Social Innovation practice, we tried to combine "planning and architecture design", "industrial design" and "information service design" to make out a collaborative approach to participate in social innovation. The entire group was split into four different teams: sociology research, environmental & industrial design, interactive, and communication design. Sociology research team carried out studies about population structure, production patterns, consumption patterns, social associations and other organizations, all of which would be used as reference knowledge for other teams while doing design. Environmental and industrial design team handled social needs mentioned in "Lifestyles and ways of living". Interactive design and communication design team aimed at solving problems mentioned in "Way of connecting". All these teams were not totally independent from each other. They collaborated on some overlapping design contents.

Fruitful design results were gathered during the camp. Typical design contents in previous three fields are selected to introduce our outputs.

5.1 Planning and Architecture

Architecture styles in Tongdao are very special. Public architecture such as the drum towers and the roofed bridges are selected as Key Cultural Relic Units of the state or province. Local residences are made of local wood and stone, which integrates with the nature harmoniously and forms the special landscape of Dong Villages.

Chen Zhihua (2008), who is a professor at School of Architecture Tsinghua University, mentioned that "Settlement is an organic system, whose historical and cultural significance and function is much higher than the total of all of its buildings. Local architecture conservation should protect the village or the town as a whole." Public architecture in Tongdao has already been under protection of the law. What we've been worried about are the local residences. From 2006 to 2009, we've witnessed the destruction process of local landscapes.

The villagers don't recognize the value of their landscapes. They saved up for years to change their wooden houses into cubic cement and blocks decorated with white tiles. These houses are not esthetically beautiful and do not fit the environment. What makes the problem so difficult is that the villagers' willing choices and our objectives to maintain the overall landscape are contrary.

Most of Dong villages in the area are located along the Pingtan River. The water quality is still clean up till now. But we have found the increasing signs of contamination in the past three years. More and more solid trash and sewage is directly dumped into the River. If we do not take actions as soon as possible, the pollution of Pingtan River is only a matter of time.

In New Channel Social Innovation Practice, we tried to face these problems in

different aspects.

From the perspective of protecting landscape of local villages and architecture, environmental & industrial group surveyed the current status of local villages, landscape and resources, and made Ancient Village Protection Guidelines and Pollution Control Guidelines, which were presented to the local government as policy making reference. The contents of Ancient Village Protection Guidelines includes the identification of ancient architecture, restoration and transformation methods, material and styles requirements on newly constructed buildings, issues related to protection and tourism development, the rights and responsibilities of relevant stakeholders, and propaganda approaches to enhance public awareness and self-confidence on local architecture. The Pollution Control Guidelines, which takes Gaotuan Village as an example, discussed methods to deal with daily garbage, waste water, ways to reduce agricultural pollution, as well as viable models of Ecological Agriculture. A brief sanitation regulation is also suggested in the report.

From the construction point of view, in order to help villagers to find a reasonable balance between new housing building and the protection of ancient villages, we designed new folk housing prototypes that meet the needs of local residents and are compatible with the existing landscapes. Based on the traditional ones, the new folk housing prototypes have improved to be more reasonable and comfortable, especially in ventilation, protection against the rain, fire, noise, strengthening the weak structure and reconsidering some functional layouts for health reasons. These advantages would help to attract local people to choose the recommended housing style willingly, so to achieve the goal of protecting landscape indirectly.

To benefit from landscape protection is another important incentive to stimulate the villagers to take conscious actions. Therefore, we also developed a local tourism planning for the village of Hengling to promote cultural resource utilization. This is also in line with local government's future economic development plan, to promote the local economy by tourism. We selected the appropriate sight spots after a survey in the village, and planned service area, distribution area, and tourist routes accordingly.



Fig. 2: traditional public architecture, local residential housing, new folk housing prototype

5.2 Industrial Design

5.2.1 Furnishing service design.

Our survey found that Tongdao has rich forest resources of very good quality. But

most of the timber processing factories are very small in scale and work with poor equipment. Their products are limited in kind and lack features. The industry chain is very short and local, thus has low added value on wood products. Many forest products are sold at a low price with only primary processing.

From the perspective of the traditional skills, Tongdao has excellent skills in using wood materials, which can be proved by the local public buildings and furniture. But as the demand for constructing traditional buildings is decreasing, local carpenters prefer to go out to seek for better opportunities as their income becomes instable. In the long run, here comes the problem of losing traditional skills.

We also found that the income growth and the pursuit of a better home life have brought huge consumption potential for local furniture market. There are three kinds of furniture consumption patterns at present, including local furniture, imported furniture from big cities and home-made furniture. But local residents can't find a balance between price, quality, function and aesthetics in these existing trade models.

We also found that government takes multiple roles in the local poverty reduction work, such as supporting local business, job training, and subsidizing the peasants to drive market demand. But all these efforts are independent to each other, and have not formed an effective force.

Facing problems and opportunities described above, we designed this local furnishing service system. The new service re-designed the relationship among local residents, local carpenters, government, forestry, furniture manufacturers, and other stakeholders.

The core measures are as follow: the government helps local small factories purchase wood processing equipments to improve their product mix. The small factories buy local forest timber and make it into plank stuff with different specifications, which can be directly used for building houses and making furniture. The local carpenter will be organized into a local association. Local residents purchase the standardized plank stuff and contact the local carpentry association for assembly and customization services. The furnishing design innovative mechanism comes from three ways: firstly, design institutions who take part in government projects aimed at rural areas; secondly, local carpenters create design solutions with the help of some special training; thirdly, cooperation with local design schools. As an example of furnishing design innovation, we've made the interior design with furniture and decoration matching the folk housing prototype done above in the guideline of low-cost and high-quality.

The new services make up the defects of the original three kinds of furniture trading models, and help the local residents enjoy furniture that in low in price, high in quality, functional in usage, and good look in aesthetics. The operation of the service unites the efforts of government in poverty alleviation and economic development to form a virtuous cycle of investment and income. It stimulates the prosperity of local furniture related companies and forestry by consumption pulling, and ensures the new furnishing is consistent with the original cultural tradition. Carpenters association is organized in this service as a key part to provide furnishing service collaboratively, which stops the loss of wood craftsmanship by enhancing carpenters' livelihood

capabilities and guarantee the continuity of local building and carpentry techniques. The service meets the economic, environmental and social criteria in sustainability.

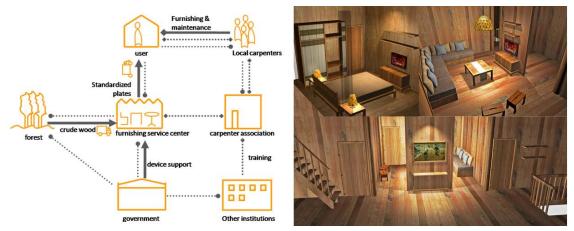


Fig. 3: local furnishing service design

5.2.2 Products & visual design.

Design for local residents.

Local women have very low level of education and they have no other source of income in addition to farming. But we found most of them master a variety of handicraft skills such as self-made fabric, ornaments made by cloth, and Dong brocade. We also found there are only few souvenirs for tourists. And most of them are imported from China's coastal areas, where they were mass produced without any distinction. They don't have attractive local features. So we designed home textile and decoration products derived from the local fabric Dongjin. Local women could make these products in their free time and earn extra income by selling these products to tourists.

In addition, we also observed a number of delicious and unique local products, such as Dong Wang wine, red bayberry wine, snacks and other local products. We made some commercial designs for these local specialties, such as wine bottles, packaging, posters and so on.

Design for outsiders.

This series include three themes: First, visualize local architecture, which aims to present the most valuable cultural heritage and the local landscape to outsiders. Second, study and modernize Dongjin (traditional local fabric). Third, using graphic design to manifest local texture and communicate local features.

5.3 Information Service Design

We found that cell phones have been quite popular in rural areas. It has become an important tool for communication and entertainment. We made in-depth studies on rural information needs and found some opportunities worthy further design. For example, we studied patterns and habits of villagers in finding working opportunities and designed a phone-based job hunting service.

Though computers and internet are not common there, residents can access the web in the Local Cultural Center of each village. Like most of other rural areas, a large

number of young adults work in big cities and leave behind many children and elderly people. Family members are separated and cannot meet each other all year long. Phone is their main tool to keep in touch. But in order to save on phone costs, the frequencies of calls are very low, once a week or even once a month. Migrant workers living in far away cities want to know more news and changes about their hometown. But the information that the phone could bring is very limited.

For these reasons, we think the Internet can also be used to link migrant workers and their family members. Most of the young migrant workers have the experience of using the Internet. They can talk on QQ, browse the web, and use forums sophisticatedly. However, children and elderly people in rural areas have few chances to access to a computer. So their computer's operating capacity is relatively low. They cannot handle the complex registration process and use the online video chatting on QQ or Skype.

Taking ful consideration of these characteristics, we designed the local web tool as simple as possible. Through the site, migrant workers can learn all the news from their hometown. And children and elderly people can use the video chatting function easily after a simple training process.



Fig. 4: local web tool

6. Communication

6.1 Participatory Communication

Movie design is an important work content of the communication team. We partly used the method of Participatory Video. We played the unedited video fragments taking during the day to the villagers on an open basketball court every night during the camp. These video clips were warmly welcomed by the villagers and stimulated lively discussion among them. Then they recommended us with contents they thought worth shooting and actively helped us to find out people, custom and special ceremony worth recording, and organized to perform local music for us. In this way, the villagers participated in the movie and music design process actively. This interactive process helped us collect the most real and vivid life and entertainment scenes in a very short time. The recommended process also helped the villagers to rediscover their most precious traditions, customs, skills and architecture, which would enhance their local culture pride and community cohesion.

After the summer camp, we reorganized these contents into five movie clips in

the theme of Dong Landscape, Lusheng (reed-pope wind instrument), Dong People, Local Handicrafts and Left-behind Children. Two local music albums were produced using the local original music and ecological sounds as materials. These movies on one hand recorded the local immaterial culture in a digital way, and on the other reflected some existing social problems in Tongdao. These movies and music albums will serve as medium to connect and communicate with the outside world, using the excellent cultural traditions to attract more social resources and getting the problems recognized and solved.



Fig. 5: movie design

6.2 Innovation Diffusion Communication Model

Social networks and media were used to amplify social innovation, stimulate more creative ideas and practices on rural community. The process would also attract other social power to join in, thus adding more linking social capital to the community, which might bring in information, source and development opportunities.

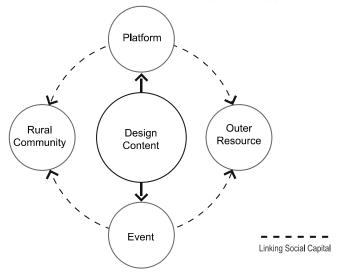


Fig. 6: innovation diffusion communication model

In New Channel design practice, we carried out communication in two ways, joining events and create an enabling platform. Here, "event" refers to the public activities such as international video festivals or competition, the mainstream media activities, exhibitions, tourism promotions and other public events. "Platform" refers to

the knowledge platform for the region.



Fig. 7: knowledge platform (www.mypingtan.com)

Through these means of communication, we have established connections between the NGO Right to Play and Tongdao County. The former will provide training support for the latter on early childhood education.

7. Conclusion

Designers, if only carrying out "design services" in the form of social force, will not obtain substantial structural power in community transformation practice. Therefore, "construction of knowledge platform" and "organization design" may be a viable design method to involve. In this practice, we have identified the needs of social innovation in the region through the participatory approach. By taking the natives' point of view, we tried to construct the "local knowledge platform" that meets the local demand, and established organizational network consisting of the local government, external business, local residents and cross-disciplinary design team. Through these means, we have changed the former participatory approach, in which designers serve in an uncertainty and individual "business needs" oriented way (user-centered design), into a new method that integrates design resources as a power of network, and promote social innovation that meets common social needs (community-centered design).

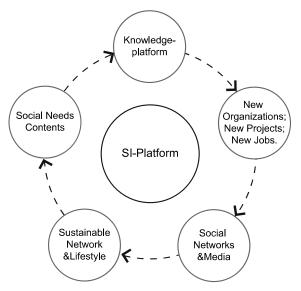


Fig. 8: social innovation platform

Design based on networks and communities may become a new paradigm of social innovation. Knowledge platforms, organization design and social learning and other sectors are all dependent on the building of network platforms and cross-disciplinary collaborative design in the process of social innovation. Networks and virtual communities will make design participate in community social innovation in a more tensional structural form and social identity power (innovation networks, design networks, social networks, etc.) making a web-based and sustainable harmonious community possible.

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