Abstract
The urban regeneration in China is entering a new stage as the past pattern of large-scale demolition and reconstruction is called into question. Now a new consensus is made on making small-scale and gradual regeneration in urban areas. Although more and more architects are involved in various stages of such projects, these actions are fragmented and deeper insight into the whole process has rarely been done. This article aims to examine the new tasks of architects under the gradual urban regeneration background in developing countries and make an overview of this task shift. The main method of this article is by case study. First, the gain and lose of selected cases related to the hot issues on bottom-up and community empowerment are discussed with comments presented. In the following part, a pilot project done in China is introduced by three facets of the task shift, namely the role that architects play, the scheme form of their work and conservation focus. They respond strongly to the new urban regeneration trend. All the cases together help to make a comprehensive understanding of the task shift and propose a universal toolset for further studies.

Keywords: Task Shift, Architect, Urban Regeneration, Process
1 Introduction

The working form and contents of architects have changed a lot according to current city development situation. In the ancient times, architecture is defined as “harmony and concord of all the parts achieved in such a manner that nothing could be added or taken away or altered except for the worse (Alberti, L, 1452).” It is interesting if Alberti could see the Quinta Monroy Housing project designed by the 2016 Pritzker Prize winner Alejandro Aravena, who encouraged residents’ self-building and modification with only the core structure built by the architect. What will he say about that? The definition of architecture is no longer a permanent one. Apart from the architecture itself, the planning rules and regulations are also evolving, affecting the work of architects. In America, urban designers and planners serve as consultants in many participatory planning; in Japan, architecture studios facilitate community empowerment in the renaissance of villages. All these phenomena prove that nowadays architects are doing more integrated work beyond designing permanent buildings.

In the urban regeneration realm, a change of the architects’ work is even more necessary. On the one hand, the schemes made by architects is about the final output after a long time enforcement, during which many new situations may occur. The lack of flexibility makes it difficult to realize the original intention. And it is often based only on the judgment of experts, ignoring the thoughts of residents. So the traditional work requirement is unrealizable to a great extent and causing social unfair. On the other hand, spontaneous adjustments made by residents are constantly ongoing, especially in the areas like shanty areas and urban villages. Improper regulations on these informal actions cause either chaos or barrier to residents’ reasonable rights. There is a need for more guidance and regulations. Obviously, this is the time for architects to put down their schemes drawn on papers and take on the work in the ongoing practice. Then the question arises: Is there some new work for architects under this circumstance? What are the forms of them? If the former regeneration scheme output is unrealizable, then what kind of output may be realizable? What kind of role should architects play in the whole process of urban regeneration? If the output is changed, then how to make new evaluation in conservation areas?

This paper tries to make some reflections on these questions by case study method. First, some former cases are analyzed for their experiences and lessons. Causes of the deficiencies are shown, based on which possible modifications are discussed. Advantages of the cases are also discussed from the view of their extending possibilities. Scholars and related literatures are also discussed along with the cases. Then a pilot project responds to the issues is shown in the following part, with a relatively comprehensive process scheme. The task shifts of architects is explained in three facets in this pilot scheme. Finally, a possible toolset with its key points is raised based on the case studies, which may provoke further study.

2 Former cases and Reflections

2.1 The power and restrictions of bottom-up actions

Tianzifang is a famous arts and craft block in Shanghai, China, developed from a traditional residential area with Shikumen traditional architecture style. It is well
known because of its unique bottom-up process in China. At 1988, a famous artist set up his art studio there and then several artists followed to rent houses in the same block. They took inspiration of the traditional architecture style and decorated the houses with modern art taste. Although this action was really accidental, it made tremendous difference to this area. When the government intended to demolish this block to make way for real estate development in 2006, rejections were raised by local residents, artists and business owners, as well as scholars and social experts. It is extraordinary compared with similar blocks in other parts of the city. Generally speaking, this kind of block will be torn down for new development with the former residents arranged to move out. The Tianzifang case was an exception. Stakeholders made an effort and the government finally agreed to make a moderate renewal proposal instead of demolition. After gaining the legal approval, this block accelerated on its path to a commercial block with traditional art icon. There established several boutique shops, cafes, studios and even museums along with art studios. Many residents are happy to make modifications to their two-story houses: the ground floor for rent and the upper floor for live. After decades of regeneration, mainly by the bottom-up actions, this area has been turned into a mixed use block (Fig1)

![Fig1 the mixed-use of Tianzifang-ground floor commercial and upper floors living](http://zcnfoto.lofter.com/post/eacdf_27db7a)

Is the Tianzifang project a success? To some extent, it is a model for bottom-up regeneration in China. The most obvious result is remain of locales and prevention of gentrification. However, it is so unique that difficult for other blocks to follow. If were not for the famous artist and urban design experts, the government wouldn’t investigate the existing condition and make specific policies for the regeneration. So there is a need to regularize different stakeholders’ involvement in the decision making system.

Aside of the lively condition of mixed use, troubles also occur. According to investigations, some locales’ life is greatly disturbed by out-comers, even leading to conflicts. The starting point of the regeneration - to gain economic profit via rent, has become a barrier for its further development. The profound aspect of this conflict may lie in the misplacing of space-function relationship. In this area, the public facilities
were shared by several families and not properly treated in accordance with the function change. The work on facilities and the reorganize of spaces is indispensable for architects. Disappointingly, it is an important top-down work yet well done.

2.2 Reflections of community empowerment

Since the 1980s, Japanese urban development has endured a shift from the central government level to the local government level, and the citizens’ participation has been strongly promoted (Masami K, 2015). The “Charrette Workshop” developed by Meiji University is a case in point. They held the workshop regularly every year since 1993 as a part of the university curriculum. Till now the process has lasted more than twenty years. If not for their workshop, the historical assets are very likely to be destroyed from the development pressure and the building owner’s generation change. The “Charrette Workshop” shows great accountability of the design process to the public. Their working process consists of five parts: sharing basic information, site survey, collecting local opinions, analysis of the site and neighboring areas, specific design for an effective site. Among the five parts, the first threes have a close relationship with the locales’ participation. After the whole process, in order to make the workshop output more than an instant event, they also make digital records of the whole process for the local press. (Fig2)

![Fig2 Scene of presentation to the municipality and citizens](Source: Masami, K. 2015)

Based on the workshop practice, scholars made reflections on Japanese municipal policy, building administration and architectural education. The similar problems occur in other Asians countries like China as well. For example, the Japanese scholar argues that “Japan had preferred the task which the effort appears in concrete figures, and ordinarily postponed the quality of the environment and value of the town scape (Masami K, 2015).” This is what also happens in China. Although this problems are revealed to known, still many works are to be done. The evaluation system is the basic cause leading to this fault and deserves a change. Furthermore, the urban policy is criticized for its sophistication and difficulty for understanding. The top-down approach is not done in a comprehensive way because of the useless vertical administration structure and conflicts among different ministries. The proposal of a fundamental decompose of the political administration structure is reasonable.
Similar to the important role that Meiji University plays in urban regeneration process, in Taiwan China there are some NPOs (Non-profit Organization) and NGOs (Non-governmental Organization) making their voices heard to public. Sometimes they work directly towards the objective goal, and sometimes they serve as catalysts. They do not play roles as community leaders, expert consultants, or direct change agents. Rather, they make it possible for others to carry out these roles (Milofsky, C. 2006). The involvement of participation in every successful project proves that the voluntary part is as important as the participation of local residents. As for architects, the involvement of architecture scholars and students is a feasible way to provide this kind of power to facilitate the process of a small-scale and gradual urban regeneration.

2.3 Beyond the architectural form

Urban regeneration is a comprehensive integration of vision and action aimed at resolving the multi-faceted problems of deprived urban areas to improve their economic, physical, social, and environmental conditions (Ercan, 2011). In this integrated target, the strategies for buildings and urban space is directly linked with physical and environmental conditions, and also have a profound impact on the economic and social aspects of the target area, which makes the work of architects a fundamental one.

Ordinarily in regeneration process, the architects figure out the elements for conservation at the first stage. Normally, these elements are all things about architecture-the construction-itself. In other words, the urban context and the logic of space are ignored partly due to the difficulty to be illustrated. The urban context refers to things such as block size, density and height of buildings, the direction and width of lanes inside the block and so on may be altered greatly. The result is that in many regeneration cases, the elements of architecture are kept with its space logic totally changed. Either new commercial shops along wide roads with traditional building style or high class townhouse residential areas with segregated community structure is this kind of misplacing. For example, the width of path in Fig3 is totally altered from traditional Chinese style path, with its width multiplied two or three times. In this sense, although the buildings are meant to be in traditional style, the block can only be understood as a new developed real estate program rather than a regeneration of a traditional one.

![Fig3 buildings with tradition elements in an altered spacial context](http://blog.sciencenet.cn/home.php?mod=space&uid=69051&do=blog&id=749016)
Just as Hillier. B pointed out that space largely influences people’s behavior and the space logic is the code for the city and city life (Hillier, B. 1996), thus the logic of space is equally important as the form of it. Especially in urban regeneration projects that concerning conservation issue, the characteristics of public space and the social relationships carried by community layout deserve to be paid more attention to.

3 Pilot project of Xiaoxihu

The following part is based on an urban regeneration pilot project carried out in Nanjing, China, in the year 2015. It is a voluntary campaign organized by the local government for the architecture scholars and students to investigate in the possible way to make a proper regeneration scheme for a historical conservation residential area. The work lasted for four months and yielded results that had good public feedback. In this case, the key elements discussed above are generally taken into consideration. This is a project that organizes the responses to the task shift in a relatively comprehensive way.

3.1 Current situation and former scheme

The project site-Xiaoxihu community-is located in the south part of Nanjing inner city with Qinhuai River historical area to the south. Several famous celebrities lived in this block in the history. Now the block is among the list of traditional neighborhood conservation areas in Nanjing. However, the current situation in this area with high density and population and low level of building environment needs to be regenerated. The government had organized some investigation works by experts to map the sophisticated property condition with a scheme for the regeneration made. However, the former scheme is something only about the final vision of this area. There hasn’t been an implementation plan for the whole process. Thus the former scheme only portrayed an ideal status like castles in the air.

On this basis, the pilot scheme with new working procedure and output is done. A five-party platform is proposed for the process and the works are carried out in a different way. As for the task shift of architects, the following are the three main facets.

3.2 The role-from controller to organizer

In old inner city neighborhoods, urban renewal and revitalization often fuels gentrification process, during which residents with lower income are gradually displaced by more affluent newcomers, who can afford refurbished apartments and the offerings of new elegant shops and restaurants emerging in the area (Lees, Slater, & Wyly, 2008). While in this project, the aim is to revive the community without gentrification, thus the participation of locales will be a key feature. In fact, the residents have done various kinds of modifications to their living environment. As in Fig4, these actions including adding to the existing building, partly reconstructions and the transfer of usage. (Fig4) However, they encounter bottleneck now – the too crowed and disordered situation make them unable to go on spontaneous update. To conclude, this area needs a municipal framework to facilitate further development.
In order to regulate the modifications, a municipal platform is formed. It is a five-party platform comprising of the government departments, neighborhood administrators, community empowerment organizations, the capital and professionals. The first two are different levels of government offices—one for policy and one for detailed implementation. Community empowerment organization will be developed based on current groups of people sharing the same social activities and introducing other NGOs. The role of architects in this platform is no longer only a designer, but also a part of organizer. They take on the responsibilities of informing and explaining to the public, collecting their opinions to consider the overall condition. (Fig6)

This shifting role of architects is necessary to integrate top-down and bottom-up in the whole process. Learned from the experiences of Japanese and Taiwanese regeneration cases, the gap between local residents and the government needs the interventions from a third party, and the architect is a suitable choice. Architects now face the challenge to add locales’ need to their scheme. After all, the locales are supposed to be the key concern of the regeneration.
3.3 The scheme form-from end to process

Architects often seek for an ideal condition that once reached, no more modification is needed. Just as the former scheme, the finally blueprint is done without the steps to realize it. The underlying logic is: first formulate an end output and then try to realize it. This logic is not applicable in such regeneration project because it’s adverse to embrace bottom-up process.

The new scheme made by the project team is a possible paradigm of process management. The ultimate objective is divided into three phases, and each phase contains a five-year plan. In the first five years, the construction mainly concerns about public facilities, public spaces along the inner lanes and public services. The community empowerment organizations are also fostered in this stage. In phase two, the most important historical buildings and courtyards are under renewal. They may develop into the economy engine of this area. At the same time, the public owned properties with the form of courtyards are also having the priority to be tackled with. Finally in the third phase, the environment is supposed to be suitable to encourage high quality spontaneous modifications wherever on site. Of course, the measurements began in the first phase to improve public space quality still continue all the way. So the final status is partly controlled and leaded process, not a goal set at first. These flexibility phases contribute to a small-scale and gradual regeneration of this area.

Fig7 shows the scheme made for the first phase. Unlike an ultimate work, this scheme highlights the key sections of the phase and leaves the possibility for spontaneous bottom-up actions. The definition of an ideal end is replaced by a strategic process framework. The architects’ work will be a long period of management with time-limited interventions and long pauses to witness the impetus impacts.
The transfer of the scheme form also influences the evaluation methods. The new evaluation system can’t only concentrate on the ultimate result, but should also put emphasis on the rationality of the process. As this is a weak side in the ordinary evaluation system, some inspirations can be taken from the life-cycle calculation of green buildings and other quantitative evaluation methods. Maybe the degree of participation will be another important evaluation indicator in regeneration projects in the future. Another change of evaluation is related to the multi-phase feature. The indicators may not be so concrete in each phase end. Balance and strategic goals are to be considered, helping the judgment to be fair and the whole process adaptable to new condition.

3.4 The conservation focus-from building elements to space logic

Urban renewal involves changes in the physical and functional aspects of cities as a response to urban design; it is a process of making decisions about the location and physical fabric of investment in the built environment and the adaption of these decisions to functional and aesthetic ends (Couch, 1990). In this sense, the physical fabric has a strong relationship with the functions and activity pattern. Every block has its unique characteristics in the context of cultural and city development background that should be carefully examined.

Take Xiaoxihu pilot project for example. This community block is listed as a historical features conservation area. By investigating into the historical buildings in the block, we can find that their conservation grade is not very high and their conditions are not agreeable. Then why is this area worth to be conserved? It is due to its urban fabric patterns-the scale, the courtyard housing patterns-something about the logic of space. Specifically, the courtyards that one can go through after modification of splitting the whole family house into several independent residential units is one of the most eminent features. As the comparison in Fig8, the difference between the roof view and the accessibility of the ground floor manifests the interesting space logic. If look on the whole, the feature of high integration value of inner block spaces is formed by the aggregation of such courtyards. (Fig9) This layout contributes a lot to the neighborhood atmosphere and the traditional residential culture.

Fig8 the contradiction of roof view courtyard layout and ground floor accessibility
(Source: google map and drawn by author)
The space logic is the material carrier of history. So the space organization logic with a strong support of cultural background deserves the same value as the traditional elements used on buildings. In the past it was often ignored because of the large-scale redevelopment pattern and figurative evaluation system, and nowadays it is becoming a significant part of conservation work. To sum up, in a whole process scheme that includes public participation, the features of space logic are important for a proper correlation between the physical environment and people’s real use of them.

The three facets all together form a toolset that may be applicable to other regeneration projects in China. They response strongly to the concepts discussed in former cases such as participation, bottom-up, indispensable municipal base and so on. The local residents and the press both made high evaluation of the pilot project. As the whole scheme is finished within one year with the first stage just started, the final gains and lose is to be examined by time.

4 Conclusion

According to the small-scale and gradual urban regeneration trend, architects find that both their working methods and working outputs are changing. However there has rarely been a comprehensive scheme to embrace the concerns. Based on case studies, the multi facets of task shift of architects are discussed. In the pilot project, the role that architects play, the scheme form of their work and the conservation focus all together formed a toolset that might be applicable in general. As new detailed problems may occur during the practice, further study on how to transfer smoothly from the old municipal system to the new one, what modifications should be made in different situations may be the next to explore. Luckily, this article provides a comprehensive basis for more detailed study of this theme.
References


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