

PARTICIPATORY DESIGN IN STRENGTHENING

SENSE OF COMMUNITY

-A PD Proposal for Hubin Reconstruction Area in Hangzhou, China

By

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To the Faculty of Washington State University:

The members of the Committee appointed to examine the thesis of QiQi find it satisfactory and recommend that it be accepted.

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SENSE OF COMMUNITY

Abstract

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The Hubin reconstruction project in Hangzhou, China has led to a loss of sense of community.

Participatory design (PD) has been suggested as a method to help solve this problem. The improvement proposal which follows presents the steps and strategies that could be adopted in this PD process.

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Chapter 1

INTRODUCTION

A brief evaluation of Hubin Reconstruction

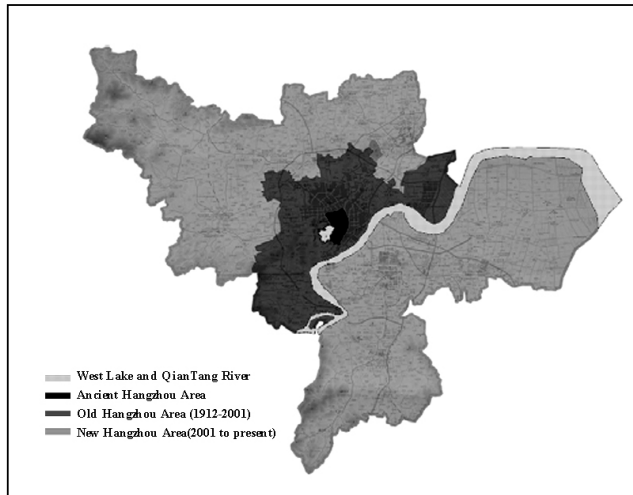


Fig.1. The Sprawl of Hangzhou Area (Ye, L., 2)

The city of Hangzhou expanded its administrative district from a 683 square kilometer small city to a 3122 square kilometer metropolis in 2001. The fast expansion resulted in the readjustment of the city and its suburban area. The function and

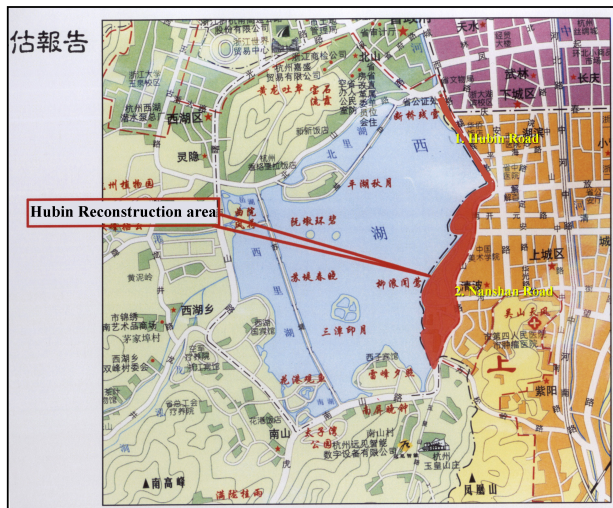


Fig.2. The Area of Hubin Reconstruction (map from <http://www.xiashanet.com/xiasha/hzmap.html>)

character of each area has been redefined in the new urban development plan and economic development strategy; the old city space would be reconstructed.

Hubin reconstruction is devoted to establishing a new mode of economy, making the West Lake the center of

the great Hangzhou area and fostering the development of economy and tourism of the whole area. The reconstruction covered the Hubin Road (1) and Nanshan Road (2) (as showed in figure 2).

The reconstruction has changed the layout and physical environment of the original lakeside by linking various previously closed areas along the lakeside and adding many large plazas.

The reconstruction has also broken the original economic pattern, and a new economic pattern is being established. The major changes include:

- a. Breaking up the original small communities, and trying to integrate the lakeside into a greater Hangzhou system.
- b. Moving the existing residents out and disallowing future common residential development. (Luxurious residences are permitted)
- c. Pulling down many common eateries and replacing them with expensive cafés and bars.
- d. Establishing high-class shopping malls.

The advantages of the reconstruction mainly lie in two aspects:

1. Making this area a new recreation center of the Greater Hangzhou area and allowing more people to share this open space.
2. Opening many closed areas along the lakeside and endowing them with new functions.

Just as one coin has two faces, this plan also has vital weaknesses. Breaking up the existing

mature community brought problems: valuable historical districts were demolished or inappropriately remodeled, thus losing their uniqueness; new open spaces were built which were incompatible with the original environment; and some of the new places are not good permeable to old urban fabric. What's more, the high price along the lakeside kept ordinary consumers away, although these were the biggest percentage of the population of the city, and the lack of enough median to low cost facilities incurred dissatisfaction.

Chapter 2

RESEARCH METHODOLOGY

- **Literature Review**

At first, I started with literature reviews to establish some basic concepts, like “community”, “sense of community”, “participatory design” and their relationship. Successful examples of participatory design application in strengthening sense of community have been quoted. We also introduced China’s participatory design status, comparing it with that of other countries, and discussed the major differences. After that, we indicated that it was possible to use the participatory design in China in order to enhance the sense of community in many situations.

- **Reviewing Documents**

Secondly, I reviewed much material about the Hubin area. Starting with the history of the city of Hangzhou, the West Lake, and the Hubin area, and the economic development status and trends, I introduced the background of the Hubin reconstruction project and compared its master plan, detailed landscape, the real estate market, and the leasing market before and after reconstruction. I also quoted the reconstruction results evaluated in historical, design and economic development aspects by government-invited experts.

- **Phone Interview**

Thirdly, We had a detailed discussion with 20 different interviewees, including Hangzhou residents who have lived there for over 20 years, for more than 10 years and for less than 10 years, residents from suburbs around the Hangzhou area, tourists from nearby cities, professors and students from China Academy of Art, employees in neighborhood businesses,

and morning exercise groups. Unlike the short onsite interview, we introduced our topics smoothly after some casual chatting. I prepared more than 10 different topics and then invited the interviewee to express their opinions based on their interests. From different experiences and backgrounds, our interviewees provided much interesting feedback from different perspectives during our phone talks.

- Questionnaire

Lastly, based upon the phone interview experience, the government's evaluation and my 27 years' personal experience living in Hangzhou, I came up with a questionnaire. It covers the interviewee's age, gender, residence, the frequency and style of their visits to the West lake, favorite part, and comparison with other waterfronts. A part of the questionnaire was distributed through email, while the other part was distributed and collected on site in the Hubin area by the students of China Academy of Art. As a result, we got a total of 102 valid samples.

Chapter 3

LITERATURE REVIEW OF

“COMMUNITY”, “SENSE OF COMMUNITY” AND “PARTICIPATORY DESIGN”

3.1 Community

3.2 Sense of Community (SOC)

3.3 Sense of Community with New Urbanism

3.4 Participatory Design (PD)

3.1 COMMUNITY

3.1.1 Definition of Community

What is "community"? As defined by the Merriam-Webster Dictionary, community mainly has three levels of meaning.

1: a unified body of individuals: such as, a: state, commonwealth; b: the people with common interests living in a particular area; c: an interacting population of various kinds of individuals in a common location; d: a group of people with a common characteristic or interest living together within a larger society; e: a group linked by a common policy; f: a body of persons or nations having a common history or common social, economic, and political interests; g: a body of persons of common and especially professional interests scattered through a larger society <the academic community>

2 : society at large

3 a : joint ownership or participation; b: common character; c: social activity; fellowship; d: a social state or condition.

The dictionary definition shows that COMMUNITY has broad and complex meanings, which not only focuses on PEOPLE, but also extends to the whole society. Of most importance, COMMUNITY itself could be PARTICIPATION, or equal participation. The definition corroborates the assumption that community is closely bound to social participation of the residents. The discussion of the conceptual evolution process will further illustrate the complexity of the notion of community.

3.1.2 Evolution of the Concept of Community

The vision of community initially emerged as a very idealized one, in the social sciences, and then deeply influenced all the relevant theories that followed, including those regarding psychology. Only in more recent studies has a more articulate definition begun to appear which takes into account its dialectic and conflicting components.

Seymour Sarabon (1974) reviewed the concept of 'community' as used within sociology and psychology and critically discussed the assumptions made by sociologists and psychologists: "The overall thrust is clear: a community is more than a political or geographical area. It contains a variety of institutions which may be formally related to each other or not related at all. It is made up of myriad groups, transient or permanent, which may have similar or different purposes and vary in size, purposes and the power they possess or seek."

Recently, Monica Colombo, Cristina Mosso and Norma de Piceoli further questioned a

community's assumed homogeneity and uniformity and instead proposed to adopt a more dynamic view of community that takes into account issues of conflict and power. They suggest characterizing the city as a local community and as a local society. (Colombo, M., Mosso, C., Piccoli, D. N., 2001, P.1)

From this point of view, it can be concluded that community-type and social-type can co-exist and therefore even cities can be considered as both local communities and local societies. So the Hubin area, as the city center of Greater Hangzhou, can also be considered as a community. By considering the Hubin area as a local community, both the territorial and non-territorial methodologies can be adopted.

3.2 SENSE OF COMMUNITY (SOC)

In 1974, psychologist Seymour Sarason defined the concept of "sense of community" as follows:

“The perception of simile to others, an acknowledged interdependence with others, a willingness to maintain this interdependence by giving or doing for others what one expects from them, the feeling that one is part of a larger dependable and stable structure.”

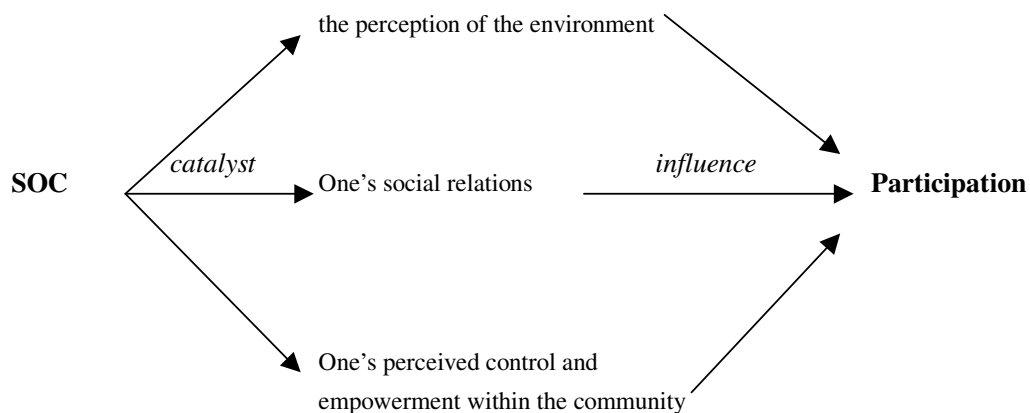
After him, McMillan and Chavis(1986) defined sense of community in terms of four interrelated elements:

1. Sense of membership: feeling and awareness of being part of an integrated whole.
2. Influence: understanding the possibility of making or avoiding changes, controlling one's

life and environment.

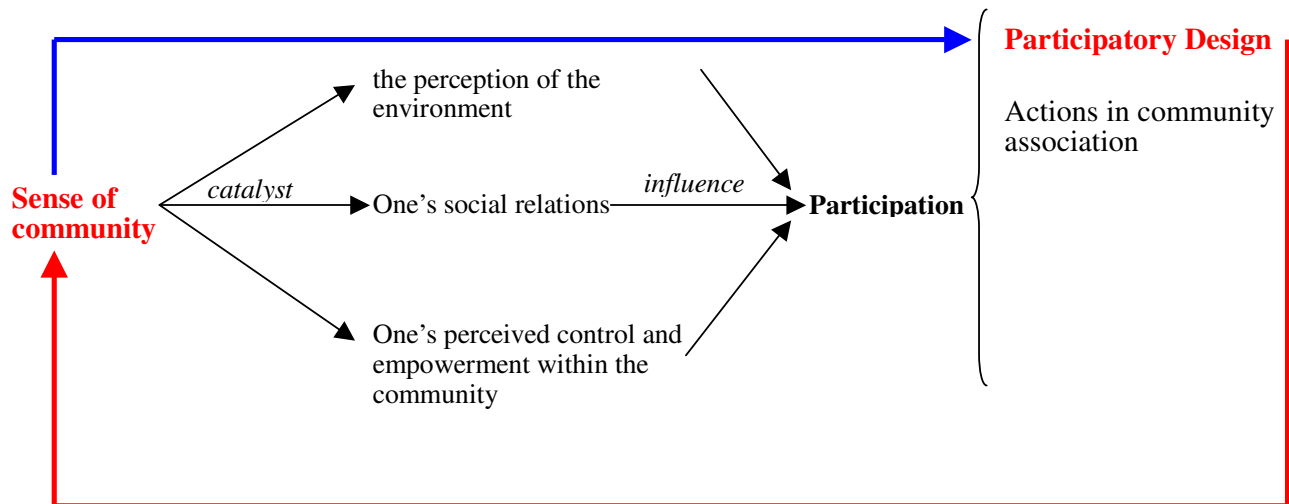
3. Integration and fulfillment of needs, contributing to the development of cohesion.
4. Shared emotional connections: the perception that individuals have a feeling of not being isolated but of being able to count on a supporting network.

The publication by McMillan and Chavis has stimulated much research on and interventions in territorial communities to enhance a sense of community (Anoni et al. 1993; Martini and Sequi, 1995). Their research shed light on two assumptions. The first is that a circular relationship between sense of community and active participation in community life exists: ‘a sense of community can be both a cause and effect of local action’ (Chavis and Wandersman, 1990, p.73). The second assumption is that the relationship between a sense of community and community competence (its problem-solving ability) through collective effort is reciprocal (David M. Chavis, 1990).



Dia.1. Chavis and Wandersman's Research Model (David M. C., Abraham W., 1990)

Chavis and Wandersman’s research explored a model which says that three important components influence an individual’s participation in voluntary neighborhood organizations



and that sense of community plays a catalytic role in mobilizing the three components. The

Dia.2. Chavis and Wandersman’s Enriched Model (By Qi, Q.)

three components are the perception of the environment, one’s social relations, and one’s perceived control and empowerment within the community. From this model, we can deduce the interaction between sense of community and participatory design (PD), since PD is a means of participation. Our research will enrich this model to explore ways to encourage participatory design and enhance a sense of community during the PD process.

3.3 SENSE OF COMMUNITY WITH NEW URBANISM

New urbanism, whether in the media or professional literature, often focuses on “sense of community” as one of the major assets of this approach to urban design (Audirac, 1999; “Bye-Bye Suburban Dream,” 1995; Kelbaugh, 1997). Well-known ‘new urbanism’ architects such as Andres Duany, Elizabeth Plater-Zyberk and Peter Calthorpe concluded that, a ‘new

urbanite' neighborhood must include a well-planned village layout, tasteful architecture and, most importantly, a commitment by its inhabitants to establish a sense of community.

According to the research of Joongsub kim and Rachel Kaplan, the four main domains of sense of community includes bonding with community, identifying (with) community, being involved in community and knowing community. (Kim, J., 2004)

In this sense, Hubin, as a new urbanite community, should not only be the new center of Greater Hangzhou on the map, but should also connect and involve the residents with it and, finally, assume the ownership of this area. More briefly, it should re-establish a sense of community.

3.4 PARTICIPATORY DESIGN (PD)

Participatory design which originated in the Scandia (Schuler & Namioka, 1993) includes the user in the design and implementation process. On the one hand, it is a user driven design methodology that places the user's needs at center stage, and on the other hand, as defined by R. C. Dacies, B.R.Mitchell, it is a complex process of mutual learning, understanding, communication and cooperation.

3.4.1 Development of PD Theory with SOC

Participatory design is rooted in work with trade unions in several Scandinavian countries in the 1960s and 1970s; it was then introduced to the design realm to actively involve the end users in the design process to help ensure that the product designed meets their needs and is usable. In recent years, researchers involved in design research and human factors deepened

the idea of participatory design from a psychological point of view.

Rachel Kaplan argued, “it (Participatory Design) may serve as an antidote to vandalism: at a time when large portions of the population feel unneeded, when adolescents need to “create adventure” (Ladd, 1977), design solutions that rely on such human power may be more humane as well as cost-effective.”

By contrast, the “City That Is Not A Tree” (Alexander, 1965) relied on gradual evolution and sequential change. Participatory design gains much by gradualism and impermanence. It is a good design solution to compensate the mass error and maintain an urban area’s ability to adapt and change. Typically for public open space, PPS 2000 (Project for Public Spaces) has addressed the benefit of participation in the development of urban parks and open spaces that includes a strong sense of community and an increased sense of user or community control (Francis 1989a).

In addition, participatory design also resembles the method employed in qualitative research, whose tradition can be described as naturalistic, ethnographic, or humanistic. Therefore, participatory design, as a part of this tradition, is an effective method to establish the sense of community.

3.4.2 Purposes of PD

Henry Sanoff, in his book “Participatory Design: Theory and Techniques (1990)” reasoned the two main purposes of participation are:

1. To involve people in design decision making processes and, as a result increase their trust

and confidence in organizations, making it more likely that they will accept decisions and plans and work within the systems when seeking solutions to problems.

2. To provide people with a voice in design and decision-making in order to improve plans, decisions and service delivery.

Another important purpose of PD is the act of bringing people together, making untraditional relationships, and cultivating a sense of community.

3.4.3 Scales of Participation

In a review of literature, there are important qualitative differences in participation within small groups and organizations, yet it is not always recognized that participation involves both scales. General participation studies are categorized in terms of whether the size of the unit of analysis was a small group, the organization, or the community. All of these different groups depend on the number of participants involved, the topic, and the social relationship.

Small group participation

The character of small groups affects the susceptibility of member opinions to group influence. The members of a small group tend to conform to the group's norms because of individual needs (affective and opinion evaluation), internal pressures within the individual to be accepted by the group, and external pressures and sanctions imposed on the non-conformist by the group (Verba, 1961).

Small groups tend to exert a great influence on a member's opinions because the member

does not have the opportunity to be selective about the information he/she will be exposed to (unlike the mass media), relations among members are diffuse and general, rather than specific to any particular type of behavior, and informal decision methods emphasize consensus, unlike voting which allows for opinion differences (Verba, 1961).

Organizational participation

Organizational theories of participation is most highly developed for large-scale, formal organizations in which members participate on a contractual basis under a model of inducements-contributions exchange. The types of organizational participation are based on the concept of the 'prime beneficiary' according to Blau and Scott (1962).

3.4.4 Structure of Participation

As stated by Henry Sanoff, participation is related to different time periods in the participation process, which can be divided into three phases:

- (a) Design phase,
- (b) Construction phase,
- (c) Administration and maintenance after the completion of the project.

As Sanoff figured out, "the effects of participation during those three phases can be the subjects of considerable research." However, in most circumstances in reality, participatory design is confined to the design phase, which is most intense and time demanding for the user's representative.

3.4.5 Models of Participation

In a project, there are three important actors: designer (expert), user, and client. Designers are employed by clients to design for users. Sanoff described the relationship between expert and user as follows:

‘Participation can be active or passive. A rough division of these two extremes results in opposing poles of expert autonomous and user autonomous architecture.’

The concept of expert autonomous denotes architecture stemming from the architect’s own subjective ideas and values. In user autonomous architecture, the architect is more or less eliminated from the planning, design and construction process (Wulz, 1986)

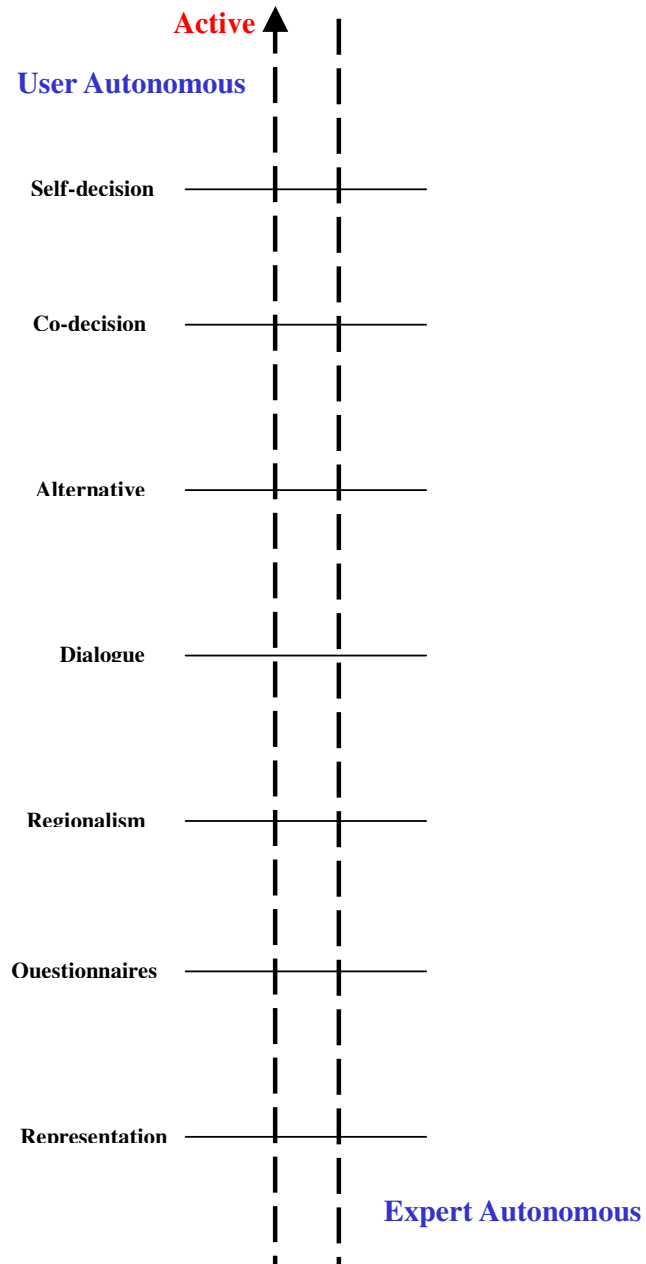
Seven different forms and stages of participation are identified between the poles of expert autonomous architecture and user autonomous architecture as described by Wulz, F. (1986).

They are described as:

- Representation: Expert’s consideration for the user’s desires and personal needs
- Questionnaires: Statistical gathering of a user group’s requirements, an indirect form of participation of an anonymous group of people
- Regionalism: Consideration of the specific cultural heritage within a geographically limited area
- Dialogue: Conversations between users and architects
- Alternative: Users are given the choice between several alternatives within a fixed set of boundaries.
- Co-decision: Taking part in a balanced decision situation

- Self-decision: Decision-making by the users themselves

This model can be depicted as follows:

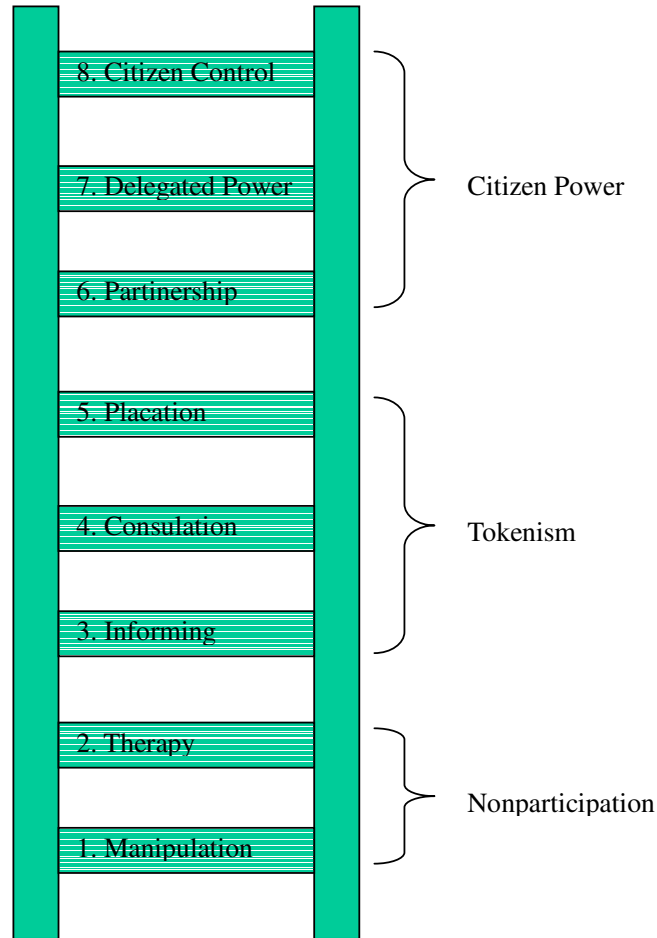


Dia.3. Henry Sanoff's PD model (Sanoff, H. 2000)

This model creates two poles, active and passive, which correspond to user autonomy and expert autonomy. It arranges all the PD methods according to the degree of user activities. That is to say, this model divides the PD methodologies based on its target audience.

In reality, the participation process could be more complex than described above, if we take developers into account. Especially in China, where in many circumstances, the governments act as the developers, since they are the owners of all the lands in the country, they have most of the power during the decision-making process. So we should consider developers as a factor. We can locate developers somewhere between experts and users; their relationship is embodied in dialogues among them, which helps them to exchange opinions. Experts use users' knowledge as a source of information to comment on the governments' proposal.

Besides this model, Sherry R. Arnstein, a famous critic in the 1960's, introduced a typology of eight levels of participation. The eight types are arranged in a ladder pattern with each rung corresponding to the extent of 'citizen power' in determining the end product. The advantage of this model lies in its discussion of the PD levels and essence, which is especially fitting to analyze the conditions in China, where PD remains in low levels.



Dia.4. Sherry R. Arnstein's PD Model (Arnstein, S. R.,1969, P.218)

(1) Manipulation and (2) Therapy

Both are non participatory. The real aim is not to enable residents to participate in design or conducting programs, but as Arnstein mentioned, “to enable power holders to ‘educate’ or ‘cure’ the participants.”

(3) Informing.

It is the first step to legitimate participation, which “allows the have-nots to hear or have a voice.” However, it places more emphasis on a one-way flow of information.

As Arnstein said, when participation is restricted to these levels, there is no follow-through, no "muscle", hence no assurance of changing the status quo.

(4) Consultation

It can be a legitimate step toward full participation. But, it still cannot guarantee citizen opinions and concerns will be taken into account.

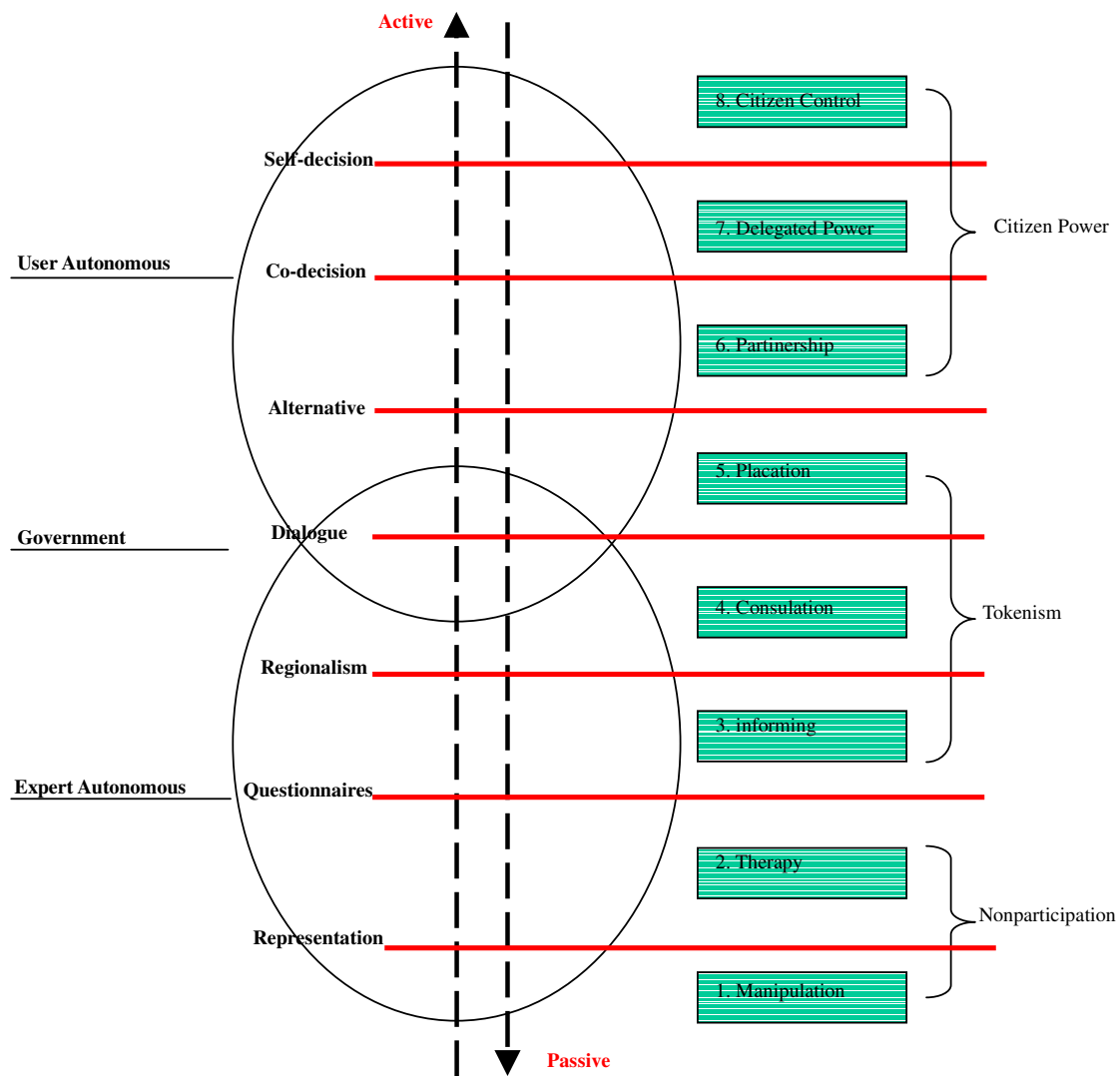
(5) Placation

In Arnstein's opinion, it is simply a higher-level tokenism because the ground rules allow have-nots to advise, but retain for the power holders the right to decide the legitimacy or feasibility of the advice.

(6) Partnership

This enables citizens to negotiate and engage in trade-offs with traditional power holders. At the topmost rungs, (7) Delegated Power and (8) Citizen Control, the have-nots obtain the majority of decision-making opportunities, or full managerial power.

Both models have their advantages and focuses. If combined together, it shows both the PD methodologies and their corresponding levels. The following diagram shows our configuration of PD model, involving experts, developers and users; PD methodologies, PD levels and essence. This model is used to compare PD practices in modern western countries and current China.



Dia.5. Combination of Sanoff and Arnstein's PD Model (by Qi, Q.)

Chapter 4

CASE STUDIES

- 4.1 Successful Case Studies of PD in Strengthening SOC
- 4.2 Realities of PD in China
- 4.3 The Main Difference of PD in Western Countries and China
- 4.4 Discussion

The PD methodology has been used in modern Western planning processes for decades. We can find not only many applications but also continuing academic interest in it. Their democratic spirit and method serve as good references for our planning process. In contrast, PD is still in its infancy in China. This chapter starts with two PD examples in two Western countries, a study of their methodologies, their impacts and critiques. A brief introduction of Chinese PD experience will be followed by a comparison with the western PD methodology. These methodologies will be mapped and compared in the model introduced above. We will conclude with some helpful tips about modern Chinese design.

4.1 SUCCESSFUL CASE STUDIES OF PD IN STRENGTHENING SOC

4.1.1 Vancouver “City-Plan”, A "Super" Public Participation Project

The PD project in Vancouver, Canada, is a famous “super” case of fostering sense of community. It was advocated in Vancouver, Canada from 1992 to 1995. It has become a focus of participation research and practice in North America in recent years.

Vancouver’s government was not satisfied with citizen’s limited movement on the process. It

lacked younger generations and minorities. The government decided to broaden the participation to get extensive support. Participation was scheduled to be carried out in four phases over two and half years. (Actually, the whole process was finished in five years, with more participation than originally planned for.)

Phase 1: The Public provided ideas during the planning stage (November, 1992 to April, 1993). The City Council invited and helped all citizens to organize "City Circles", each of which comprised 10-15 persons. A City Circle could be an existing organization or a group especially organized for this project. The government advocated volunteers (including planners, architects, social workers, teachers, nation-organizations and young volunteers) to organize 300 "City Circles". A "Helping center" was also established; it consisted of personnel from five related departments. To help the participants, a "Tool Kit" was issued in different languages: English, French, Chinese, Indian, Vietnamese and Spanish, with bold big fonts (especially for visually impaired people), and accompanied by recorded tapes and websites. The members of City Circles could raise ideas personally or collectively, but all the ideas should be ideal and practical, not just theoretical. The government invited artists to help the public express their opinions with pictures. About 3,000 people raised ideas, which were collected in a 477-page book; as a permanent document and criterion for urban planning; every participant received one copy of it.

Phase 2: Public discussion (April to June, 1993). There were around 10,000 people participating in the three-day exhibition. "City Circles" also gave lectures, street shows, and

model illustrations to propagate their ideas. Every visitor was given a Checkbook to vote on “potential meaningful” ideas.

Phase 3: Public decision (February to August 1994). The urban planning department processed the information collected in Phase 2, and grouped it into 12 topics: residence, job, community, transportation, society, service, security, infrastructure, public arts, public building/park, environment, finance and executive form. These topics were put into a 40-page Choices Work Book in six languages, and distributed by public libraries and community centers.

Phase 4: Public draft discussion with the City Council. (February to June 1995). The urban planning department collected copies of “Choices Work Book”, and various questionnaires to make guideline drafts. The drafts were exhibited in front of city hall and fire stations. The city councilors came to these sites to discuss the draft with the public.

This participatory design incurred both praise and blame. The Dean of the Planning Department said that PD had helped the government to make some important choices by gathering people together. For example, the old policy of planning was 70% low-density residents working in the downtown area, which heavily burdened the traffic. The new policy initiated from PD suggested mixed-use residence, service and work. She quoted Thomas Jefferson’s words to show the importance of public participation:

"I know no safe depositary of the ultimate powers of the society but the people themselves; and if we think them not enlightened enough to exercise their control with a wholesome discretion, the remedy is not to take it from them, but to inform their discretion by education. This is the true corrective of abuses of constitutional power."

However, professor Michael Seelig showed different opinions. He considered the PD as a ridiculously advocated notion. He said that participation here was not a method but a goal, and that the PD results were not worth five years and 15 million Canadian dollars.

He concluded the problems of the PD as follows:

The PD was based on a specious assumption: everyone has interest in participating

1. The extensive participation is not rational
2. Many choices in the process made no sense as in “ Which one do you like, rich and happy or poor and unhappy?”
3. The process was too long to keep up with reality
5. The design cannot always meet the need of public

Although the super PD project has incurred a lot of censure, its advantages also are visible:

It sought to solve problems using cooperative principles; and strengthened social “centripetal force”, especially by accepting and harmonizing the minority’s opinions. What’s more, the program helps foster a sense of community by getting citizens out on the street working towards improving their environment.

1. Establish political reputation; provide government an opportunity to identify resonating

connections in regard to demands and opinions.

2. Improve administration efficiency by communication with the public, which allows the public participants to positively cooperate with the practice of planning; the responses from the public smooth the practice; the innovative ideas and opinions from the public provide new perspectives.

4.1.2 Seattle Waterfront Improvements Project

Located in the North Seattle, facing the Puget Sound to its north, and distant from downtown, the project base has a highway to its east. The PD includes the strategic planning by 300 architects, urban planners, engineers, landscape architects, including the representatives from Jones and Jones, the Berger Partnership, Charles Anderson Architects, the Nakano Architects, the KPFF Architects, the EDAW, and sketching by coast guards. There was feedback from the Seattle city officers, citizens, the crews of the Washington ferry system, community activists, and etc.



Fig.3. Concept Design of the Central Waterfront (Bower,S., for the DPD)

Each group came up with its own plan based on different analysis and feedback, these plans mainly fell into the following 4 categories.

1. Organizing the use of land by its function.

2. Integration of form and function and

endowment of landscape nodes with different functions.

3. Protecting and respecting the plants and animals in the neighborhood, reutilizing the buildings, and historical heritages.

4. The application of modern means of transportation, utility and material.

Finally, the urban designers incorporated these different ideas and worked out the seven guidelines for reasonable planning policy, and the whole planning process should follow the seven guidelines that resulted from the PD. The successful experience of this large scale PD promotes a new design methodology for the Seattle waterfront area, as well as a new channel to communicate the design to the citizens. What we want to emphasize is not the planning process itself, but the impact it generated: the Seattle residents are very proud of this PD process and take their responsibility in it seriously, hoping the implementation to reflect the essences of their design.

4.2 REALITIES OF PD IN CHINA

In the last decade of the 20th Century, China introduced the PD methodology into our urban design process. We have made significant progress during the past 10 years, but our PD is still far from real "public participation".

The city of Kunming, one of the pioneers in urban planning, held its first urban planning exhibitions in 1988. Afterwards, many cities including Shanghai, Shenzhen, Qingdao and Nanchang encouraged citizens to participate in their urban design and city planning by means

of questionnaires, planning model exhibition, design posters and public hearings. To some extent, these attempts achieved their goals: On the one hand, they met the aim of planning communicating and promoting understanding. On the other hand, it allowed the designers to understand the public's opinions and use them to improve design and planning.

4.2.1 Zhong Shan Road PD Practice, Quanzhou, China

Zhongshan road has been an important commercial district in the city of Quanzhou since long time ago. Started from 1920s and with a total length of 2.5 km, this street a well-maintained example of sotto portico style commercial building. But as most old streets, Zhongshan road was facing the problems of old facility, aged buildings and human destruction.



Fig.4. Zhongshan Road

(<http://www.lnlt.cn/blog/html/72/t-472.html>)

The protection and maintenance of the Zhongshan road had been regarded as a very important task by the local government. The planning started after 3 years preparation. The urban planning and design department investigated the collected material in detail; created feasibility documents for every building, recorded every detail of facade and provided constructive feedback for improvement. They also discussed the reconstruction plan on television and in newspaper columns for Zhongshan road, organized meetings with experts and residents, and incorporated participants'

feedback. This PD process attracted most of citizen's attention and helped collect a lot of original material of old Zhongshan road.

This project was considered to be a relatively successful example of PD practice in China, but without regulation of the process, the reconstruction project went back and forth a couple of times. For example, special paths for the blind were designed to be constructed in Zhongshan road. But the bureau of planning decided to cancel it before its completion. The decorative plants were reorganized for times. And the parking lots planned to be canceled at one time, yet kept as hourly parking finally.

There are also some good examples of PD in China, such as the New YaoDong Dwelling construction by the Green Architecture Research Center (GARC) of Xi'an University of Architecture and Technology. To best understanding resident's need, the GARC team lived in the Yaodong community for a significant period of time. This experience not only gave the team a good opportunity to do on-site research, but also allowed them to conduct surveys, collect questionnaires and interact with local users. The results of the PD practice turned out to be greatly welcomed by the locals: improved their living conditions greatly, and conserved the vernacular building style and culture meanwhile (Liu, J., Wang, D., 2002)

But generally speaking, participatory design in China remains in the lower levels. In most cases, the public participants acted as passive recipients, whose own opinions were seldom embodied in the design product. For example, the main problem in Shanghai Community

Planning is that planners made decisions for users; they did not always harmonize with and embody the needs of the government, developers and community representatives. Faced with only the final product, the participants can hardly get involved in the whole design process. According to Liang Henian, a famous architect both in Canada and China, the pitfalls of PD in China mainly represent three facts:

1. Deficient information

The information collected by questionnaires is not representative: the sample pool is limited; many questions in the questionnaire are vague and general; and it is hard to extract useful information.

2. Low levels of participation

Mostly the PD process is just to “inform” the participants of the completed design; most of the process is “manipulated”. Even in Kunming’s famous participatory design process, the public can at most enjoy the well-made model, which combined many modern technologies like multi-media and computer simulation. Just like Arnstein said, “Under a masquerade of involving citizens in planning, the experts subject the citizens to clinical group therapy.” They just showed an attitude that many problems in design would be cured by “participation”. It is at most an empty ritual of participation: “What makes this form of "participation" so invidious is that citizens are engaged in extensive activity, but the focus of it is on curing them of their "pathology" rather than changing the racism and victimization that create their "pathologies."

3. Time consuming

Participatory design in China was mainly limited to large-scale projects. In the wake of high-speed construction, many projects in China have very short project cycles, and therefore a short design process. The time-consuming character of PD cannot keep up with the project tempo in China.

Looking forward, we need to first complete the legislation of planning, thus providing the legal basis for public participation; second, we should develop a well-organized PD process; Last but not the least, we should more actively advocate knowledge about public participation.

4.3 THE MAIN DIFFERENCE OF PD IN WESTERN COUNTRIES AND CHINA

The widely used PD in China is mainly an exhibition of designs. Even the early stage PDs just aim at investigating the current status. The major differences between the PD in Western Countries and that in our country are:

First, the real PD should be an interaction with citizens during planning and design phase, not just an exhibition of completed plan and design. Real PD not only enhances the accuracy of planning decisions, but they also limit government influence and promote effective public responsibility.

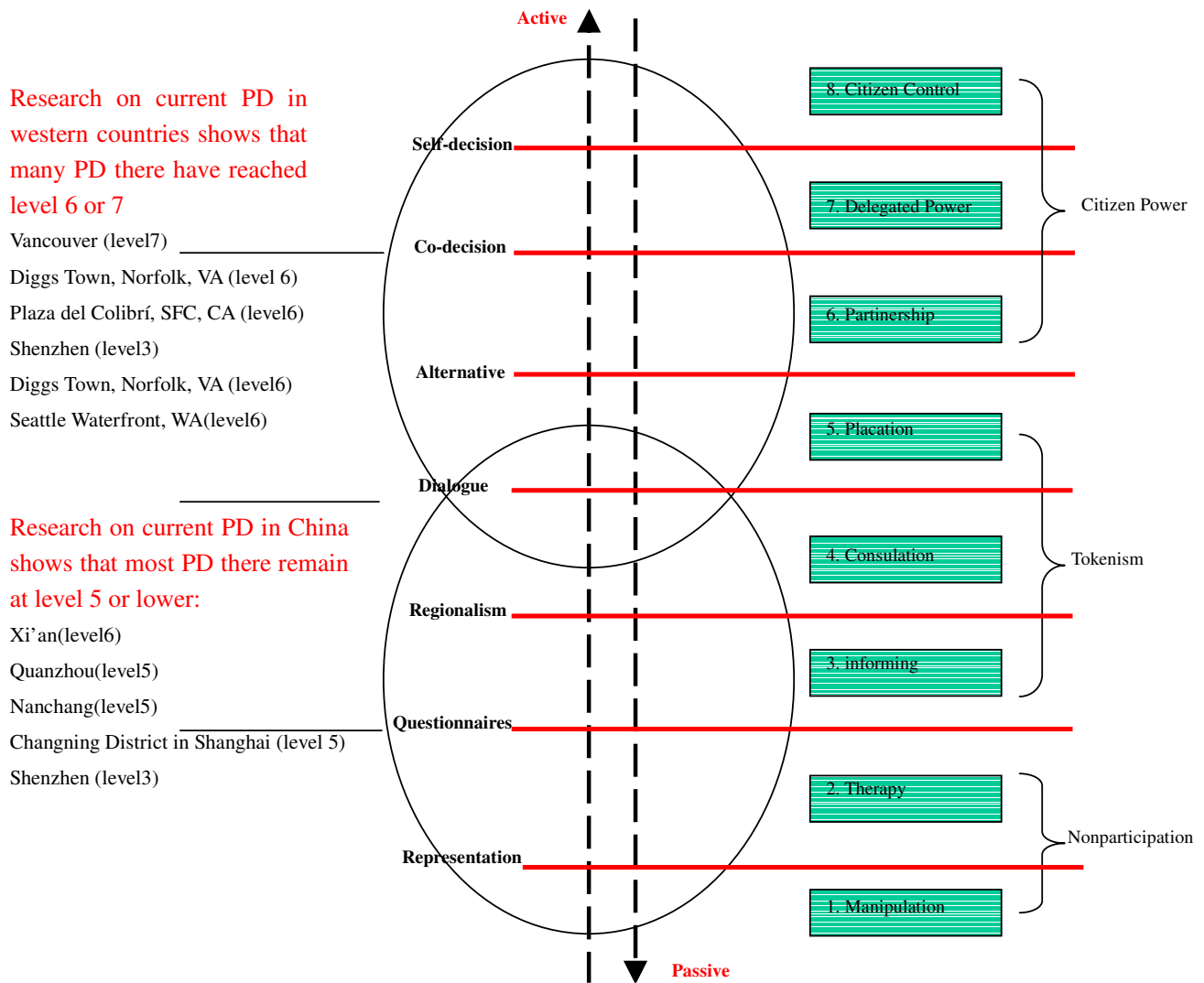
Second, the real PD is not individual participation. Rather, it should be the participation of well-organized non-profit organizations, enterprises and resident representatives. Pure

individual PD does not have extensive representation; the ideas collected do not receive much attention. Therefore, the organization and mechanism of PD is an important factor.

Third, the public participation urban planning in China is not supported by laws and protective regulations. Currently, the laws of urban planning mainly focus on the authorization to the urban planning department, but with no guarantee for the public interest.

In order to combine the PD with the urban planning mechanism, we need to protect it by legislations. In other words, we need to protect the validity, fairness and legitimate of PD in the urban planning process by law. By contrast, the "The law of urban planning" by the British government in the 1990s published the legal PD process for planning, publication and filing for all kinds of urban design. PD is regarded as the framework for the modern British legal system.

Fourth, considering the different education level of participants, PD should focus on the planning, locating, and evaluation phase, not the detailed planning phase. For example, to guarantee the effectiveness of the PD process, the Los Angeles Traffic Planning Bureau published "The general guide for PD" and assigned 10% of the total planning cost to the PD process (Chen, X., 2005).



Dia.6. Comparison of PD in Western Countries and China (by Qi, Q.)

4.4 DISCUSSION

Many lessons, as well as experiences, have been learnt during the PD activities in the past decades. Here we will discuss how to make use of PD considering the conditions in China.

Fairness vs. Efficiency

PD is a high-cost method, which requires more time and money spent in exhibitions, and more thinking for the designer. Compared with traditional methods, it appears to be

inefficient. But from a long-term view, PD provides more fairness by balancing the requirements of different participants.

Especially for large projects in China, we should establish long-term goals. For instance, Paris is an elegant city, and it is the result of generations of public participation. The process is very slow but gives people enough space to think about the planning. In current China, construction speed is far too quick, which actually leads to excessive waste: in many cities, roads are widened in a one year period and buildings only 30 years old are torn down. These ways of construction seem to be very efficient, but they actually are very wasteful.

Participatory design is a process that takes much time and patience and is fraught with peril; spurious designs take time to be discovered, and people may have personal agendas and actively work to hijack or hinder the design process. However, the rewards are great; the final design includes ideas from many experts, especially the end-users, is acceptable to the participants since they were active in the design process, and is cost effective since expensive redesigns are not required.

Participatory design after construction should be more emphasized. In China, less attention is put on projects after completion. Conflicts accumulate gradually, because they are not solved in the beginning. When contradictions pile up to a certain extent, people have to refer to large-scale reconstruction. Currently, the average building life in China is 30 years, in Europe it is 80 years, and in France 102 years. This fact, on the one hand, shows China's rate of economic developments; and on the other hand, it says these buildings already may not meet

the need of users. The landscape projects are facing similar problems. The waste of resources can be avoided if the problems are given more attention.

Cooperation vs. Competition

The interest groups in PD fight for their own interests in the process. Sometimes they will be against some "globally" good designs for their own interest. This is not valuable for the design process. Designers need to organize cooperation among interest groups. While respecting every thought and experience of the participants, the designers should actively direct the discussion and design to meet the needs of the majority.

Organization vs. Mechanism

An effective PD means more than "individual participation". It should include representatives from different groups, like non-profit organizations, residents, etc. "Individual participation" has many limits such as lack of representation for certain groups. Although China has started to adopt the PD methodology, it is more frequently used as a way of exhibition and propagation of design (Liang, H., 1999). Sometimes individuals' opinions have been requested early in the design process, but there is no promise it will be given any attention.

In sum, if appropriately applied, participatory design is a way to redistribute power that enables the have-not citizens, presently excluded from the political and economic processes, to be deliberately included in the future. It could be a strategy by which the have-nots join in determining how information is shared, goals and policies are set, tax resources are allocated, programs are operated, and benefits like contracts and patronage are parceled out. In short, it

is the means by which they can induce significant social reform that enables them to share in the benefits of the affluent society.

In this paper, we suggest using participatory design as a maintenance opportunity in the Hubin reconstruction area for correcting errors and involving people. Of most importance, it aims to strengthen a sense of community from psychological, physical and economic aspects.

Chapter 5

PD PROPOSAL TO STRENGTHEN SOC IN HUBIN RECONSTRUCTION AREA

5.1 Introduction of Hubin Reconstruction Project

5.2 Participatory Design Proposal

5.1 INTRODUCTION OF HUBIN RECONSTRUCTION PROJECT

5.1.1 Hangzhou, the West Lake & Hubin

Hangzhou is the capital of Zhejiang Province in China. It is famous for its historic relics and natural beauty. In the late 13th century, the Venetian Marco Polo visited Hangzhou and

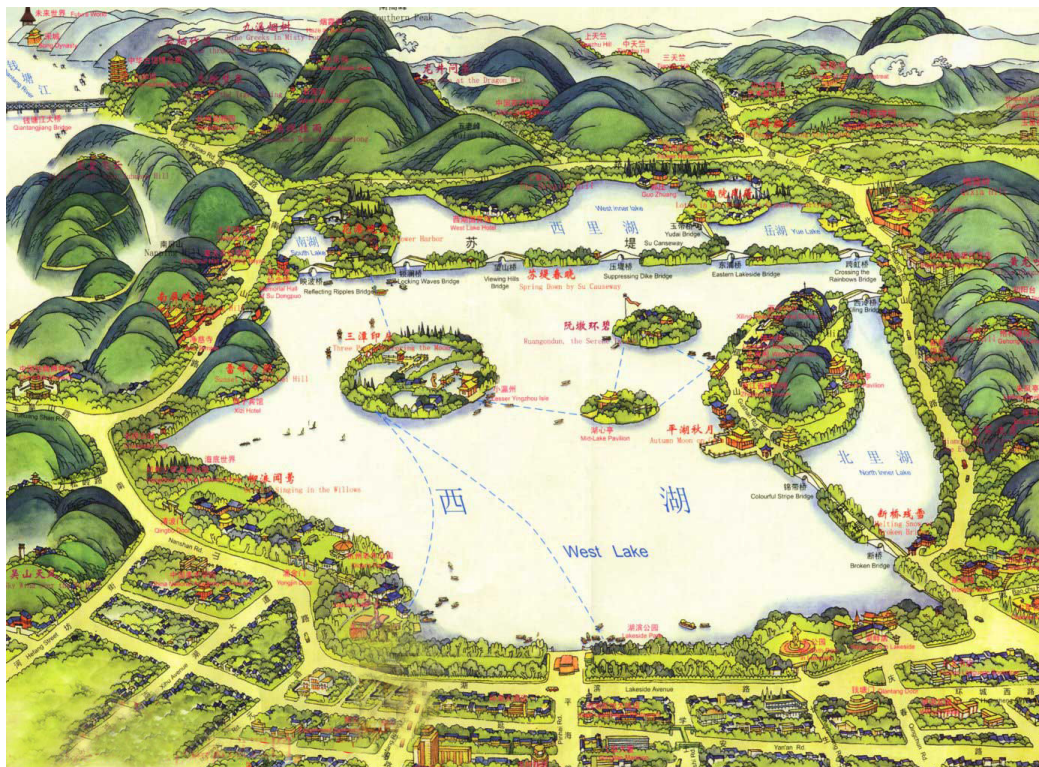


Fig.5. Bird View of the West Lake (www.gogocn.com/admin/map/281.jpg)

considered the city as "beyond dispute the finest and the noblest in the world"

(<http://wikitravel.org/en/Hangzhou>). Nowadays, Hangzhou is a cultural center and an

important tourist destination in China; it appears in the Chinese saying: *"In heaven, there is paradise. On earth, there are Suzhou and Hangzhou."*

Hubin lakeside, as the interface of Hangzhou city and the West Lake, mainly had two problems. First, Hubin road separated the West Lake from the downtown area. The road was a 6-lane main road in Hangzhou which was always crowded with cars. Since it was hard to walk across Hubin road, pedestrians were confined to narrow sidewalks at the both sides.

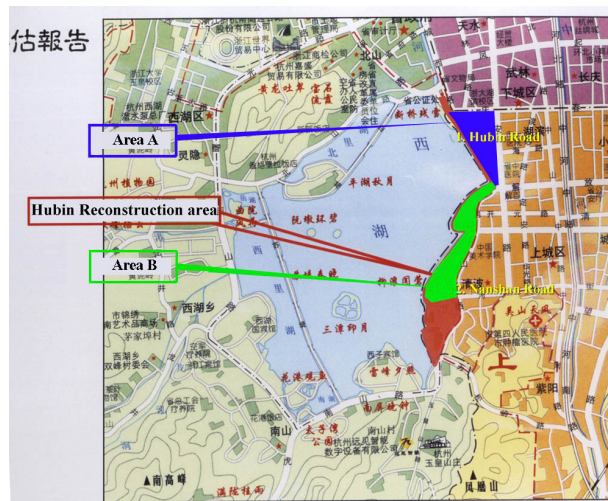
Second, there was too much closed area along Hubin. The Hubin area has been occupied by vested interest groups for so long in history because of its special location and beauty. After the People's Republic of China was founded in 1949, various corporations moved out of the locale in response to the advocacy "Return the Lake to the Public" from the government. But the closed area along Hubin still accounted for 34.17% of the entire perimeter till 2003, before the new construction.

Hangzhou city is expanding at a striking speed. After the merging of peripheral towns in 2001, the area of Hangzhou enlarged from 683 square kilometers to 3122 square kilometers. By the end of 2003, Hangzhou has boasted a population of 6.4 million including an urban registered population of 3.9 million. The development calls for more public open spaces than ever. Meanwhile, with the development of the economy, the 30 million tourist visits per year in Hangzhou infuse the city with tremendous energy and a driving economic resource for the city.

In such conditions, the remaining closed and incontinuous places in the lakeside were unbecoming, so the Hubin reconstruction emerged in 2002. The reconstruction started in May 2002, and was completed in October 2003, after 18 months, with its four goals: landscape amelioration; tourist attraction improvement, culture and economic goals.

5.1.2 Hubin Reconstruction Project

The Hubin area has been completed and gives us an opportunity to do post occupancy evaluation (POE). POE is the practice of using methods such as surveys, questionnaires, observations of people's behavior, and focus groups to discover exactly what makes the environment work well for its users. A POE is a procedure that involves users in their own assessment of their everyday physical environment. POEs can be effective in correcting environmental errors by examining urban environments in use, and preventing potential errors through the use of survey results in a project's programming stage.



The Hubin area discussed in this paper comprises two parts: A. from West HuanCheng Road to Jiefang Road; B. from Jiefang Road to Wansong Road. They were rebuilt

Fig.6. Case Study Area (map from <http://www.xiashanet.com/xiasha/hzmap.html>)

separately with different goals. They are introduced here and evaluated as a whole in the following discussion.

Part A in recent decades, “had lost its connectivity to The West Lake and was losing its historic fabric to contemporary, car-oriented development patterns.” SWA group, a famous landscape architect in the US, was employed to give a new master plan to part A. After the 18-month reconstruction, Part A area is reconnected to the West Lake, “bringing people back into direct contact with the waterfront.” The main methods are:

1. Divert through traffic to a 1.5 kilometer long tunnel beneath the lake, allowing the five-lane Hubin Road along the waterfront to be converted to a promenade;
2. Other “Water Streets” were reconstructed to reinterpret the historic character, scale and humanism of the historic district. Public gathering spaces were created, and
3. Four city blocks of mixed-use development were constructed.



Fig.7. Picture of the Hubin Waterfront District (Li, M., 2006, P.7)



Fig.8. Water Street in Hubin District (by

Qi,Q., 2005)

Area B is from Jiefang Road to Wansong Road. Nanshan Road, a famous street going although the area., a street style public space, is highly appreciated for its serene atmosphere with enclosed brick style buildings, small roadside shops, and tall phoenix trees. Unfortunately, it is segregated from the West Lake landscape by overwhelming constructions and plants. Viewed from here, the major part of the three independent lakeside parks (Children’s Park, Long Bridge Park and Willows Park), are hidden behind the buildings, and that contributes to the loss of attractiveness in this area.



Fig.9. The Original Outlook of Nanshan Road: The quiet alley under the phoenix tree (by

Ye, L., 2002)



Fig.10. The Master Plan of the Part B Area before Reconstruction (by Hangzhou Yuanlin Design Institute)

The red line shows the Nanshan road-Hubin road area. Obviously, it was segregated from the West Lake area. The view to the West Lake was blocked by the street-side shops or walls. The sporadic green spaces along the street did not provide good connectivity to the West Lake landscape, since they were surrounded by thick bushes.

At location (1), there was only a small path to the West Lake. At location (2) and (3), the linear space was expanded. And at location (4) the space was widened. From spatial formation perspective, there is a gradual process from closed area to open area from 0-4. In spite of its appropriate size and unique flavor, the original design does not take good

The reconstruction removes the gate and walls of these parks, making them connected green land along the river. And the total size is increased by 18.3 acres.



Fig.11. Sceneries from Nanshan Road to West Lake (after reconstruction) (by Ye, L.,2002)



Fig.12. The master Plan of Part B Area after Reconstruction (by Hangzhou Yuanlin Design Institute)

A closer relationship with the West Lake has been established with reconstruction. The passageways to the West Lake have been added between Willows Park, the Qian King Memorial and the space occupied by the Army. The street-side buildings have been resized or removed, and the original atmosphere is still maintained.

The space is expanded abruptly at Yongjin Square, the end point of West Lake Avenue. This theoretically reasonable design turns out not to be successful from users' standpoint. 2.3 and 4 have been turned into small islands to increase the depth of the landscape, which is appropriately opened to the West Lake yet maintains the original silent atmosphere.

The reconstruction has solved many problems. It not only generally maintains the atmosphere of this area but also enriches the depth of field. But some changes have come about too quickly to be readily accepted; some changes do not go well with the original environment. What's more, the reconstruction relocated a large number of residents (540 household), thus reducing the population. The high price of the newly-added upscale dining services gives rise to a sense of exclusivity, while the lack of low-end food services, and access to bottled-water, causes the limits access in the midst of prosperity.

If Participatory Design had been used in the reconstruction process, many project mistakes

could have been avoided. First, it would have helped the government and designers to identify Hubin's economic background, historical heritage and valuable assets. Second, by studying users' habits of space usage, it also could have justified designs of nodes and paths, access and linkages. Last but not least, the PD process could have provided a great chance to increase sociality.

Today, the community faces many problems caused by the reconstruction, but can still use participatory design to generate information, identify solutions to justify the designs and strengthen Hubin's sense of community. A detailed PD proposal will be raised in the next chapter.

5.2 PARTICIPATORY DESIGN PROPOSAL

5.2.1 Participants in the PD Process

An important aspect of the participatory process is individual learning through increased awareness of a problem. According to the above analysis, we realized that in the background of urban sprawl, Hubin should act as a city center rather than an ordinary community. That means we cannot treat it in a general way: It is impossible to move the original residents back in, but we can regain New Hubin's sense of community by improving its physical and economic environment.

The above analysis is from the designer's perspective. On one hand, before the designers communicate with the user population, they should deeply analyze the existing problem to figure out the crux of the technical aspects, so that they can conduct the surveys and meetings

purposefully in the process of participatory design. On the other hand, their assumptions need to be fully understood, enriched and corroborated by communication with the participants, in order to further improve the environment and strengthen the sense of community.

In the last several decades there have been numerous efforts to accumulate knowledge about various participation techniques, as well as the function that these techniques perform. Citizen surveys, review boards, advisory boards, task forces, neighborhood and community meetings, public hearings, public information programs, and interactive cable TV have all been used with varying degrees of success, depending on the effectiveness of the participation plan. Because community participation is a complex concept, it requires considerable thought and gradual process.

The first step of participatory design is to understand “who is the participant?” According to Rachel Kaplan in her paper “Participation in Environmental Design”, adequate sampling of the user population is a basic requirement in participatory design. She argues: “the different reactions between people who work in a setting and those who live there is also not surprising. Without awareness of such discrepancies, it is unlikely that design solutions will consider the differing needs of the affected groups”(Kaplan, R., 1998)

As to the methodology, there are two possible ways of conducting the research. First, we can send a questionnaire by mail to all Hangzhou citizens. This will cover the entire local population, but the major pitfall is the lack of communication and potential low return rate

(Kaplan, R., 1998). Another way is to invite people to attend on-site survey meetings.

Although this will have less coverage than the first method, those who attend will likely show great enthusiasm for the reconstruction project and provide constructive feedback. Therefore, the best way to conduct the survey is to combine these two methods. Besides that, we need to also define the focus groups to make sure that the sample group is a statistically significant representation of people. For this project, the following groups of people are of particular interest.

1. The residents of Hangzhou city, grouped by how long they have lived in the city. (less than 10 years, 10-20 years, 20 years or more)
2. The residents of the Greater Hangzhou area, including those newly merged areas like Yuhang and Xiaoshan
3. The students at the university (China Academy of Art) in the Hubin area and the



Fig.13. The Location of China Academy of Art (map from <http://www.xiashanet.com/xiasha/hzmap.html>)

- employees of the businesses (café, bar, shopping mall).
4. The elders doing morning exercise every day along the lake
5. People spending most their nights in the bars

Beyond that, to achieve the goal of effective sampling, we need to carefully select the time and location for the survey. On sunny days, we can conduct

the survey in Yongjin plaza, which is spacious enough to hold an onsite meeting with a large audience. It is also a great place to observe people's experience. Focusing on the experience of people could deepen our understanding and enhance measurement of sense of community.

Another choice would be to use the conference hall of China Academy of Art to accomplish the survey. Opposite to West Lake, this institute is located at the other side of NanShan Road in the immediate vicinity of the Plaza. What's more, this institute has a department of Environmental Art and Architecture. If possible, we should consider combining the participatory design with their courses, just as they did in Vancouver, which will benefit both parties. On the one hand, students can volunteer their time, energy and knowledge to the reconstruction of the Hubin area; linking the university with the city, and on the other hand, the on-site practice can combine students' observation, thoughts and participation in the design process.

At both locations, participation will be a voluntary. In order to cover all the focus groups, this survey should be repeated at different times, which should include a range of weekend daytime hours, morning sessions, evening sessions, and weekday daytime sessions. In morning sessions, project organizers mainly will focus on the elderly people who do their morning exercise there. In the evening sessions, they will target the young people in the amusement and entertainment facilities of this area. In weekend sessions, we expect to talk with tourists from different areas. At plazas and the campus of China Academy of Art, they will be able to talk with employees or students working in the area. Therefore, the above methods will provide a statistically significant representation of people.

5.2.2 PD Steps

Besides the appropriate sampling, we should also use the following steps in the process of participatory design.

5.2.2.1 Step 1

Step 1: Help participants to gain a sense of connectivity with the area.

There are two objectives in this step:

1. Open communication to avoid misunderstanding.

As mentioned by Lucchesi, Galati Architects, “The first meeting should be one in which the citizens are informed that the project is being contemplated.” Often, there are various rumors and misconceptions about the project, its goals, funding sources, and the site, etc.

To eliminate the suspicion of officialdom and establishment, we should first let the participants know the clearly defined goals:

- To improve the environment
- To restore the unique historical and cultural atmosphere
- Finally, to attract more people there and link people together

We should let people know that they can talk freely in the latter process about whatever they want, for example, their impression and preference about the original and current Hubin lakeside, their attitude towards the plazas and the reasons for these attitudes, the preferable material to make pavement, etc. Also we should make clear that the input gathered would be treated seriously, followed up and used in the design.

2. Establish a friendly and genuine atmosphere.

Also as Kaplan argued, the possibility of genuine impact is another requirement of participatory design. For the participatory process to have its desired effects, the planned environmental change must become in some sense the property of the participants. In this sense, a truly collaborative effort begins with establishing a rapport with the participants, and gaining trust from participants is the first step to gaining success. Therefore it is necessary to have an honest presentation of possible impacts. For example, we want to add more low-end food services, but we are not sure how many shops will increase the low-end food services (like snacks, bottled water), though the government could encourage this by certain incentives like tax reduction, etc. This is an economic uncertainty and must be shared with the participants. People are often willing to take a risk; they can, however, become unruly when what they took to be a promise turns into a possibility. (Gaffney, G, 1999)

5.2.2.2 Step 2

Step 2: Let the participants identify the character of the area

By allowing local residents to provide descriptions of the project site, the designers comes to further understand Hubin's identity in the area. (Community identity: personal and public identifications with a specific physically bounded community with its own character.

Joongsubkim, 2003) In order to maximize learning, the process should be clear, communicable and open. It should encourage dialogue, debate and collaboration. This learning process is valuable to both users and designers.

According to research conducted by Lucchesi, Galati Architects, the survey questions should not be asked as if there was a preset direction. It will make the participants more comfortable to allow subjects to be freely associated with each other from different points along their timeline, but at the same time, the designer should always keep in mind what are the problems, like the ones in Yongjin Plaza, that lie in its vague boundary and its incompatible atmosphere.

A strong community is built upon identifying, and then mobilizing, its assets. Additionally, every community has natural resources of space and physical resources, and recognizing these assets—what do we have? The needed information comes from the following seven aspects:

a. Economic

- What are the economic assets of the local individuals? How can we foster entrepreneurship?
- What is the condition of consumer expenditure (money and labor), and how do we mobilize their capacities?
- What are the local business assets and how can we mobilize their capacity?

Through phone interviews, I found that most people believe that the current Hangzhou people are not as rich as the government expected. Hangzhou residents want to get back common and specialized commodities, but the retailers have to raise product prices to cover the expensive rent. So the market is continually changing. And this marketing shift is a very important and long phase for this area.



Fig.14. Stores Were Always in the Condition of Changing Owners (by Zhang, G., 2007)



Fig.15. Old-brand Chinese Pharmacy Tongrentang has to move out Hubin Area (by Zhang, G.,2007)

Some interviewees questioned the way the government gets back its investment. They said “trying to get back the investment by selling stores is totally wrong; it is not a sustainable way.” Most of them suggested that we should rather provide preferential conditions to stores selling Hangzhou or Zhejiang's local high-quality products with distinguished features, making them another "Golden card" of Hangzhou.

b. Historical Heritage

The West Lake is characterized not by the length of its history, but rather by the richness of its heritage. It is important to do research about the path that was followed to make the New Hubin what it is today and the direction it is taking for the future. To respond to the requirement, we need information as follows.

-What's the people's attitude and familiarity towards Hubin's history?

-In how many dimensions should we explore the New Hubin's history and heritage?

-What's the impact of resident relocation, heritage remodeling and recreation on Hubin's

history? Does it affect historical integrity?

-How to integrate the wealth of information on all facets of Hubin life presented in the form of pictures, maps, narrative text into environmental design?

According to the investigation, people pay much attention to Hubin's historical physical heritage as well as Hangzhou's history. A person who has been living in Hangzhou for 30 years said, "As a native resident of the Hangzhou City, I do not feel like the replacement of traditional residences with modern high-rises is beneficial. By contrast, I would prefer the recovery of historical remnants and traditional cultures in this area." (Gu, S., 2007)

Most people consider that the West Lake, together with its surroundings, should maintain its uniqueness. They said that the urban design and tourism development of the Hubin area is a



Fig.16. Alley of Goushanli

(by Qi,Q.,2005)

good idea, but that the reconstruction should aim to retain the regional style. Many people regret the disappearance of traditional places. For example, near the Qingbo gate, used to be a place called Goushanli, a long alley with stone gated buildings facing each other. Screened by trees and accompanied by refreshing wind, this alley appeared to be a great place during the

summer time. But this is no longer the case. Goushanli has been demolished and turned into high rises surrounded by the remains.

People also show great interest in exhibiting Hubin's history, and regard as it a way to arouse and stimulate interest in the arts, music, history, literature and science about Hubin. A native "Hangzhouese" gave me an example:



Fig.17. Main Façade of Chenlu
(by Qi,Q.,2005)



Fig.18. Part of Chenlu is used as Cafe
(by Qi,Q.,2005)

Chenlu in the first park is well known as the activity center for elders, but few people know it is also a place of historic interest in Zhejiang province. This house was first owned by the son of Shenghuaixuan(a celebrity in the late 19th century), then it was transferred to Chiang Kai-shek (elected president of the Republic of China in 1943) as a wedding gift. It hosted the negotiation between the Communist Party and the Kuomintang during their cooperation in the 1930s and served as the headquarter for the third "Red Si". If we publish the major historical facts related to this house, it will be a good landscape feature with cultural importance.

Another interesting point is that we don't need to put too much emphasis on the cultural

environment of the new Hubin. Culture itself is the accumulation of life. The modern lifestyle of the young people is also a kind of culture. The real cultural atmosphere should come from modern life, but not at the loss of all the historic remains.

c. Asset

There are great assets along Hubin lakeside, and three of them have most importance: 1. Bar Street along Nanshan Road, 2. China Academy of Art (CAA), 3. the Historical Hubin district

I . The Relationship between the Bars and CAA

The Bar Street on Nanshan Road, representative of the Hubin reconstruction, was originally designed to incorporate the beauty of the West Lake at night. Standing in the Nanshan Road with so many bars around, people were supposed to feel the endless dreamlike life every night. The concept has become reality, but a large percentage of people are critical of it.

1. Conflict with China Academy of Art:

Most of the interviewees question the relationship among the Bar Street, the West Lake, and China Academy of Art (CAA). They feel that the last two should have closer relations than the



Fig.19. Bars near CAA

(by Qi,Q.,2005)

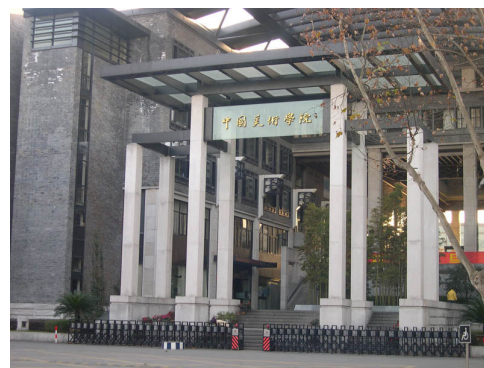


Fig.20. China Academy of Art (CAA)

(by Qi,Q.,2005)

first two. China Academy of Art has stood along the West Lake for eight decades and has become an indispensable part of it—on one hand, the West Lake influences CAA by its natural beauty and history; on the other hand, CAA adds cultural meaning to the West Lake. Nowadays the booming bars around CAA break the balance. People’s opinions are as follows:

We should have bars of different features catering to differ people's needs. But it is questionable whether we should have them in Nanshan Road, especially around the China Academy of Art. It contradicts the atmosphere of art created by the Academy and negatively affects students’ values. The more bars we have in Nanshan road, the fewer places can be used for galleries, which diminishes the atmosphere of art. We'd better use it as an exhibition of the products and academic efforts of China Academy of Arts, thus promoting people's appreciation of art and improving the city's taste and quality of life.

2. Lack of distinctive features

According to interviewees’ feedback, these bars do not have distinguishing features. As a representation of western life, these bars could be attractive to the local residents. But since they can neither compare with the beauty of the West Lake nor have a certain cultural relationship to it, they are not likely to appeal to tourists and foreigners. People who enjoy the night life of the bar scene would prefer that of in adjacent cities like Shanghai.

II. Hubin Waterfront

Hubin Waterfront Redevelopment project, mainly designed by SWA Group from the US,

gained an ASLA 2006 Texas Chapter Award of Honor and ULI 2005 Global Award for Excellence. Guided by the precept that history, people and culture are what define the sense of place, SWA Group aimed at producing an eclectic and poetic mix of old and new in this district.



Fig.21. Hubin Waterfront Redevelopment Master Plan (Li, M., 2006, P.7)

The new perspectives and ideas from foreign designers commend themselves to local residents. For example, the 1.5-kilometer long tunnel beneath the lake undertakes most of the traffic, allowing the Hubin district to be a multi-purpose, pedestrian-friendly waterfront; introduction of mixed-use development has the potential to activate the historical district. But due to lack of experience of living in Hangzhou, some of the experts' designs are considered by the locals as a bit superficial.

Water Street



Fig.22. Water Street (by Qi,Q.,2005)

For example, the concept of “city creek”, one of the design features of SWA Group, was constructed to reinterpret the historic fabric of Hangzhou city.

Hangzhou was characterized by densely covered watercourses, which historically served as a main form of transportation. Nowadays, the majority of the watercourses have been filled up to serve as roads.

The design is to revive the watercourse scenery by

introducing lake water to Hubin area, in the form of wandering creeks. But most interviewees consider

that it is meaningless to recover the watercourse, since the days of everything depending on watercourses have gone. Some people even say that the design of “Water Street” is unsuccessful from landscape perspective: “city creek” is incompatible with the beautiful, spacious, elegant West Lake. People would like to head directly to the West Lake, as they get a glance of the lake through interstices between buildings. This attitude is easy to understand. Who will stand (there are no sitting facilities along the creek) in the cold, sunshine-lacking alley to admire the artificial creek? People also question the modern buildings on both sides of the creek “You find the same thing over the world. They seem not conflict with the West Lake, but they also are not very harmonious with it.”

Not only the new landscape elements but also the added commercial forms make people feel different. One interviewee said:



Fig.23. Foreign Brands in Hubin

(by Qi,Q.,2005)

“I think the Hubin district looks a bit strange after reconstruction. Originally from the street, we could see the West Lake, together with pedestrians, passing vehicles and specialized stores. That conveys a living atmosphere and makes people feels relaxed. Now all the stores along the Hubin road are world famous stores

catering to high-level customers. Lacking enough popularity, the Hubin district seems not as flourishing as before, which indicates the design and planning flaws.”

According to the design, Hubin road should be a pedestrian only street, but right now, seven bus lines and taxis are permitted to run there. To relieve the heavy traffic and improve the environment of Hubin road, people also suggest relocating the bus routes to other adjacent streets, such as Dongpo Road.

d. Nodes and paths:

Uses and activities along the lakeside can be categorized into two types: those in nodes and those in paths. The nodes there are Rome Square, West Lake Square and Yongjin Plaza. The questions to ask of the community members include:

-What kinds of focal points bring people together? Do these spaces go well with the

surroundings?

-What are the desired activities there?

-What are the views that need to be avoided?

-What are the views that need to be emphasized?

-What kinds of amenities will support desired activities?

-Are participants interested in community-oriented programs with local talent from neighboring institutions, such as China Academy of Art? Can such programs attract people in the short term and demonstrate that someone is in charge?

-Can we change the type of events that are held or modify the space if necessary to better accommodate events?

-Can the design of the paths capture (provide) access to similar goods, services and activities as were once associated of the historic watercourses?

I .Nodes

1. Rome Square



Fig.24. Rome Square

(by Qi,Q.,2005)

In interviewees' opinions, Rome Square is nothing more than a round "plate", surrounded by columns. Although it looks like "Roman style" at first glance, it does not go well with the whole surrounding. Rome Square is very close to the lake, with an elegant eastern-style environment. This provides a perfect

opportunity for architects to create something with regional style at an appropriate scale as a finishing touch to the surroundings. Unfortunately, the current design is nothing but a copy of western-style design; it makes no sense to just put something here. What's more, the scale of the square is unreasonably large. The huge columns, which are pines imported from foreign country, go moldy because of the humidity near the lake. According to a report of Daily Morning in 09/08/2006, as of September, 2006, several dozens of columns there need to be "operated on"—almost every column has more than ten moldy holes in the body, the biggest as large as a coin, the smallest as an eyelet.

2. The West Lake Square

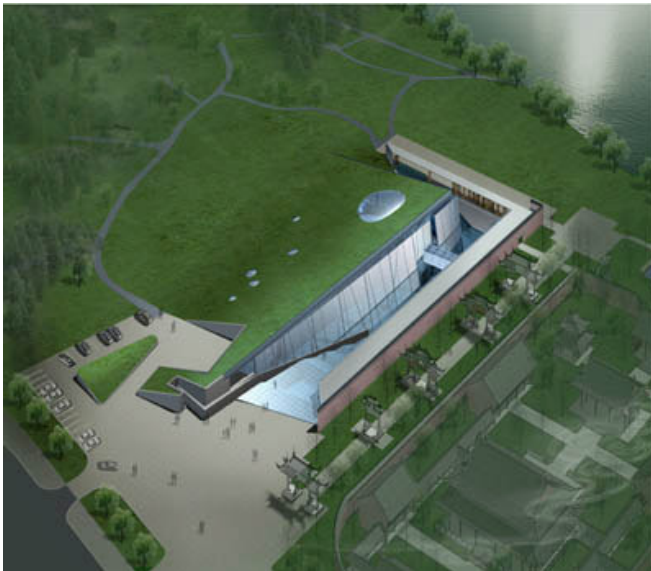


Fig.25. the West Lake Square (by Yu, J., 2003)

By contrast, many interviewees praised the well-designed West Lake Square. The design won over 20 competitors by its consideration of cultural and natural features. The West Lake is famous for its diverse and gentle scenery, so it is pretty harmonious and interesting to

mix the buildings, green lands and creeks in West Lake Square. By inserting different subjects into the scenery, up and down, facing the water and open to the wind, it creates a unique sense of place. By contrast, it is hard to find any novel designs in Rome Square.

3. Yongjin Square

Located at the crossing of West Lake Avenue and NanShan road is Yongjin plaza.



Fig.26. Golden Ox (by Qi,Q.,2005)



Fig.27. Yongjin Plaza: People Feel Reluctant to Stay in Spacious and Boundaryless Area (by Qi,Q.,2005)

The failure of its design mainly results from its incompatible scale. Reconstruction of the left and right sides of this plaza were appropriately handled to maintain the original West Lake atmosphere. But the space of Yongjin plaza was abruptly opened, which makes it inconsistent with its surroundings. Interviewees also argued that Yongjing square has no special feature at all. Springs and flowerbeds can be found everywhere and cannot be used to characterize the West Lake. The golden ox in Yongjin pond is hard to maintain and looks ugly with its fading color.

This contradiction exists not only in the sense of aesthetics, but also in people's behavior. The collective activity does require a spacious area. But too spacious an area will have negative impact as well. According to the boundary effect, people are reluctant to stay in spacious and

unsupported areas. Even for collective activity, people tend to choose areas of reasonable size and with unambiguous boundaries. Lacking internal separation and clear boundaries, Yongjin plaza is a spacious square with low space efficiency. With the busy West Lake Avenue on one side and the West Lake on the other, the plaza is now used just as a passageway.

II. The Linear Spaces between Nodes

Generally, the permeability of Hubin Road and Nanshan Road is good. The road-side stores between the first park and the Yongjin Gate were moved, and an aqueduct was created to extend the West Lake to this area, which makes the water-front Greenland an island. This strengthens the relationship between the West Lake and this area. At the same time, the street between Yongjin gate and Long Bridge Park is kept intact. To improve the permeability of this area, designers renovated roadside constructions and dense plants, adding appropriate alleys leading to the West Lake riverside.

But the segment between the Dahua restaurant and the Qingbo gate on Nanshan Road should have closer relation with the West Lake. It is hard for pedestrians on Nanshan Road feel the West Lake, though it's just within a stone's throw. It would be much better if we could extend the scenery of the West Lake to Nanshan Road and share it with residents and passengers in this area.

e. Comfort and Management

Things we have knowne about comfort and management from participants are:

-Have practical amenities-(seating, telephones, waste receptacles, information booths, food

vendors, community oriented public art, flowers, and fountains), been arranged appropriately in considered locations?

Sometimes not. For example, there are a total of three drinking fountains in Hubin area. It is too few for such a big area. People need to stand in line to wait for a drink. And what's more, because beverages in Hubin are quite expensive, many people choose to fill a bottle of water after drinking. That behavior further leads to long lines in front of drinking fountains.

- Do you feel safe in New Hubin? How can we increase security in the Hubin area?

Generally speaking, yes, but sometimes at night, maybe not, especially in the shadow of bushes. We can increase security by adding more lighting or providing more uses and activities in the place, which will increase the number of people present, or by appointing an individual to be in charge of security.

-How could we upgrade maintenance, including daily cleaning, and preventive maintenance of physical facilities?

Encouraging community involvement makes great sense. Volunteer-based organization can consist of elder people doing morning exercise daily in the Hubin area, people working in this district, and residents near the area. What's more, the Hubin area could also be labor site for students in CAA, where students have a labor week per semester.

f. Access and Lineages

-Is it convenient to access public buildings or facilities along the lake?

Sometimes not. For example, a bar named Rain of Aroma faces water in three directions, whose total length along the waterside is more than 30 meters. From an aesthetic perspective,

the site is perfect: broad lakeside view, swinging willows outside the window, and a very serene atmosphere. Yet the business in the bar is not good. The bar was supposed to serve people going there by car, but the goal failed because the site is far from the large parking lot. Nobody would like to walk more than 15 minutes here for a cup of coffee. Now the price of 10 RMB per cup of tea and 20RMB per cup of coffee do not provide enough benefit to cover the bar's prohibitive rent.

- Is it helpful to make accommodations for bicycle users?

Yes. Bike lanes, lockers, storage racks, etc. are required, since the bicycle is one of the major means of transportation of the West Lake tourists.

- How many traffic signals need adjusted timing along New Hubin to improve pedestrian access?

The ones in front of China Academy of Art and the West Lake Square

g. Sociability

- What kind of activities or special events can draw more people here?

An open-air market could be a fascinating part of the New Hubin experience. For example, a Souvenir Market could be established along Hubin Road; a Night Market could be established for anything from T-shirts to electronics in Yongjin Square; and in small scale flower markets at Rome Square. Visitors could also enjoy markets dedicated to birds and flowers.

- How can we arrange amenities to encourage social interaction?

Grouped benches and movable seating can help to gather people.

5.2.2.3 Evaluate SOC

From the discussion in chapter 3, we have observed the interaction between sense of community and participation: on one hand, sense of community plays a catalytic role in influencing participatory design, on the other hand, sense of community can be inspired and enhanced during the participatory process. Here we evaluate the sense of community in the New Hubin area and see how participatory design can enhance it.

Combing the phone interview results, questionnaires and the New Hubin Evaluation Report, we expand upon the four senses of community characteristics.

1. Sense of membership: feeling and awareness of being part of an integrated whole.

Reviewing relevant literature on particular dimensions of membership, McMillan & Chavis identified five attributes:

- Boundaries:

The West Lake, as a most important attribute in Hangzhou, is identified clearly by locals and tourists; Hubin lakeside, as the interface of city and lake, has clear boundaries. What's more, most of the open spaces there, except Yongjin Square, meaningfully interact with each other with appropriate size and definite boundaries.

- Emotional safety

According to the results of the interview, 90 percent of interviewees are confident in the safety along Hubin; local people are very proud of being citizens in Hangzhou, mostly because of the beautiful West Lake.

- A sense of belonging and identification

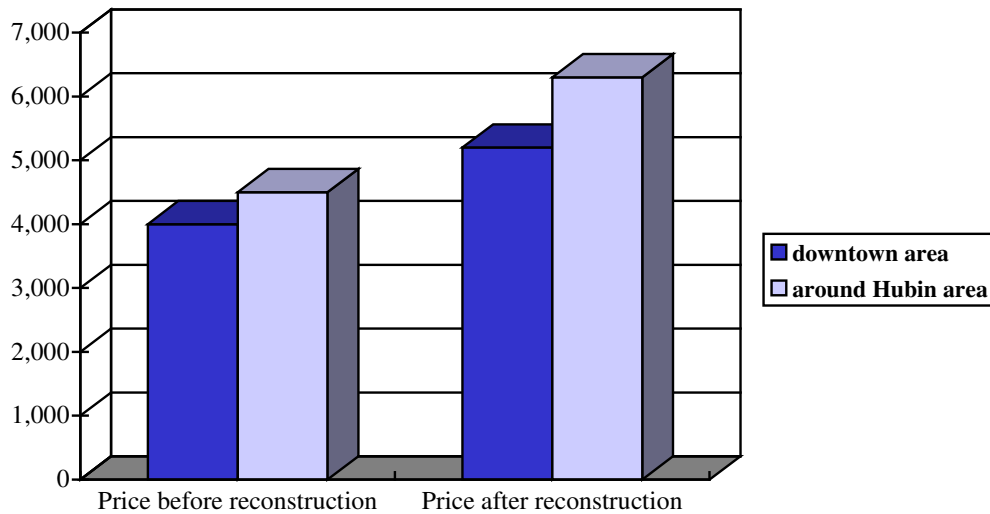
The result of the interviews shows people have a peculiar sense of belonging to the area, though more and more common people are moving far from the lake recently.

- A common symbol system (symbols might be found in its name, a landmark, a logo, or in architectural style)

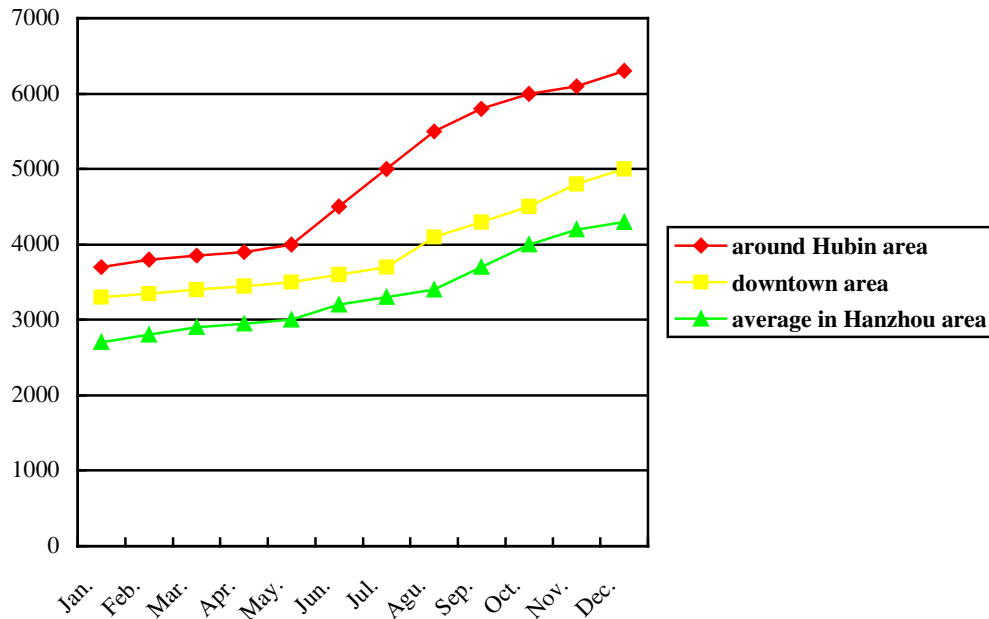
Interviewees are very sensitive to the symbol system along the lakeside: they prefer regional style to exotic design. For example, almost nobody likes Rome Square because its style and scale conflict with the exquisite landscape.

- Personal investment (could be money or time)

Personal investment including two aspects: money or time.



Dia.7. Real Estate Price in Hangzhou Area during 1999-2002 (Evaluation Report for the Southern West Lake Integration Project, 2003)



Dia.8. Real Estate Price in Different Areas in Greater Hangzhou during 2002 (Evaluation Report for the Southern West Lake Integration Project, 2003)

As for the economic development, the reconstruction highly stimulates the real estate market around the reconstruction area. With the real estate market continually going up in the whole Hangzhou area, the housing prices around the Hubin area were increased 10% more than other areas. The total increase of real estate value in the Hubin area is approximately 1.175 –1.275 billion. People feel it is hard to invest in real estate here.

For people who manage businesses in Hubin, the reconstruction brought big pressure to them. The reconstruction replaced low-end eateries with high-end cafés, cars, tea shops. The commercial real estate prices reached 25,000 RMB/ Sq. m after reconstruction, while they were only 15,000 RMB/ Sq. m before. Rental prices are as much as 2 to 2.5 times higher than before.

Comparison of commercial management in Hubin before and after reconstruction				
	Number of shops	Area of shops (Sq. M)	Rental prices (Yuan/ Sq. M.day)	Auction prices (1000 yuan/Sq.M)
Before	92	23000	2	1.5
After	65	34000	4-5	2.5

Dia.9. Comparison of Commercial Management in Hubin (Evaluation Report for the Southern West Lake Integration Project, 2003)

Mixed-use development was the goal of the reconstruction. But the results contributed to reduced use of the area. The evaluation reports said that 90% of the reconstructed commercial spaces were vacant till May, 2004, seven months after the reconstruction.

The whole economic environment in China keeps changing. On one hand, it is hard to anticipate the economic leap in China; on the other hand, it is out of the realm of design. We

will not address this topic in this paper.

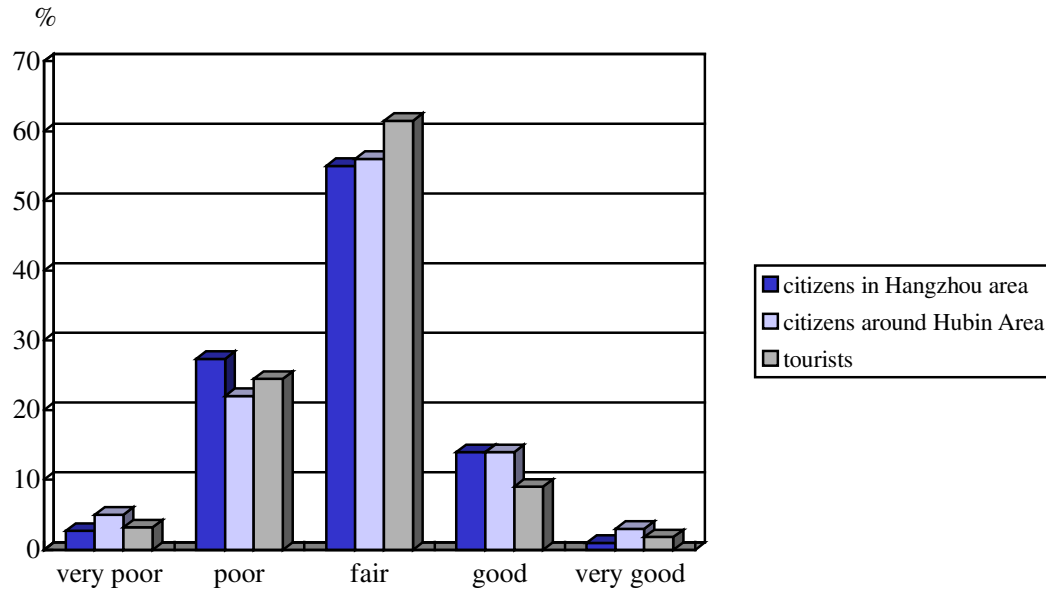
As for time and effort, the interviews showed that most people are pleased to invest in improvements. In the process of the phone interview, some people talked a lot about the history and old memories along the lakeside; some people focused more on the physical environment, making detailed comparisons between past and present. Just as McMillan mentioned, community members would like to feel "ownership" of that community, and that feeling probably comes from the investment of time in helping the community.

2. Influence: understanding the possibility of making or avoiding changes, and controlling one's life and environment.

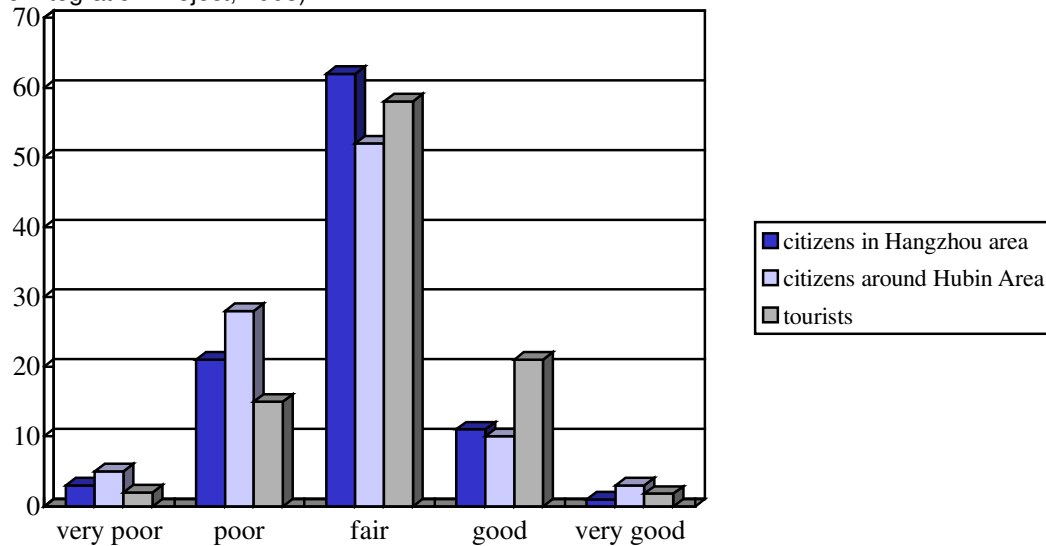
McMillan & Chavis (1986) point out that influence in a community is bidirectional: members of a group must feel empowered to have influence over what a group does (otherwise they would not be motivated to participate), and group cohesiveness depends upon the group having some influence over its members.

The interview showed that people, on one hand, get excited about the new construction, while on the other hand feel these changes are out of their anticipation and control. These changes include physical surroundings and the economic environment. For example, after the reconstruction, people who lived in the Hubin area before reconstruction were forced to leave their community, and the high price there will never allow them back.

Records show that the reconstruction relocated more than 540 households. What's more, since the reconstruction moved out a large number of eateries and shops for common people, the Hubin area is now short of such services. The following diagrams are the evaluations from citizens and tourists.



Dia.10. Evaluations for Shopping Services in Hubin Area (Evaluation Report for the Southern West Lake Integration Project, 2003)



Dia.11. Evaluations for Food Services in Hubin Area (Evaluation Report for the Southern West Lake Integration Project, 2003)

At the same time, local people are unsatisfied with the new shopping services in the Hubin area as well. Nearly 30% citizens considered that the shopping conditions there are bad; more than half of the tourists regarded it as common. According to a survey conducted by the Hangzhou government, only 18.6% people will shop in the Hubin area, 7.9% of them will drink a cup of tea or coffee there, and the rest 73.5% said they will never spend money there, “The prices here are too expensive, and nothing is special here.”

The dramatic change in the physical environment is difficult for people to manage and accept. The following is a piece of commentary from an interviewee.

“I just cannot image that so big a lake can be reconstructed in such a way---the whole area was fenced, and we all had no idea about what they were doing on our lakeside. And today, as everything finished up, when I take a glance at it, I hardly recognized it!”

To avoid these conditions, a redistribution of actual power is inevitable, which in addition can effectively generate a sense of empowerment (Appleyard & Lintell, 1972; Hummon, 1992).

Participatory design is an effective way to distribute power to community members in a gradual way. The empowerment of individuals gives residents a sense of control over their community, and the gradual process can avoid abrupt changes.

3. Integration and fulfillment of needs, contributing to the development of cohesion.

McMillan & Chavis employ the word "needs" here to mean more than survival and other needs as such, but to include also that which is desired and valued. Thousands of people come

to Hubin every day, and their needs vary according to their attitude towards life, behavior, tastes and understanding of environment. Therefore the Hubin area, as a special community, should have complex and complementary functions to meet people's needs economically and socially.

From the survey, the open spaces in Hubin can generally meet people's activity requirements and inspire deeper communication between them. For example, a certain group of people comes to Hubin to act in Chinese opera everyday. They feel happy to do so not only because of the natural environment, but also of their familiar circle of friends here. One of the interviewees said traveling a long way to get here every day has become a part of her life. She feels a certain connection with the place and the people. The environment catalyzed many spontaneous events and activities, which brought people together. This statement, if described in Sarason's words, is "an acknowledged interdependence with others, a willingness to maintain this interdependence by giving to or doing for others what one expects from them" (1974, p. 157).

By contract, the goals of businesses in Hubin are mainly focused on commercial value rather than people's needs. In the words of Qiu Baoxing, the mayor of Hangzhou, luxury business here is a symbol of successful reconstruction and the only way to cover the expense of reconstruction. As a result of this goal, the businesses here have become very narrow and simple, thus destroying part of real life. For example, retired people feel happy to do their morning exercises in front of new business buildings, but they never go into that kind of building because the retail prices there are very expensive.

4. Shared emotions: the perception that individuals have of not being isolated but of being able to count on a support network.

McMillan & Chavis's summary statement emphasizes the role of a shared history (participation in or at least identification with the community). In 1996 (p. 322) McMillan added that in a very broad sense "shared history becomes the community's story symbolized in art".

Rather than strengthen the shared history and vivid life of local residents, the reconstruction aimed to please tourists, who come and go in a hurry, and need clear and florid scenery to catch their eye. The Hubin area has a long and brilliant history, which was blended into the urban fabric. For example, the Memorial of Pantiashou was in a deep alley. When people went to visit it, they stepped naturally into the core of the community. Goushanli was a quiet alley with a history of more than 80 years. These features recorded the real life of the community. But the reconstruction hid the Memorial building's surroundings, making it stand along a street with total exposure. Demolished the Goushanli alley, they replaced it with new



Fig.28. New Historically related landscape Spots (by Qi,Q., 2005)

buildings.

At the same time, more than 20 new historically related landscape spots were built during the Hubin reconstruction, including reestablishment of the Royal Dock of the NanSong Dynasty,

rebuilding Qian King temple, a pavilion built to commemorate a poet of the BeiSong Dynasty, etc. These spots show off a large time span of Hangzhou history. The exploration of history successfully attracted lots of tourists, who brought a lot of money to the government, but destroyed a part of real life in Hubin.

These analyses are based on my phone interview, questionnaires and the government's evaluation of reconstruction results. In the suggested participatory design process, more various ways of collecting opinions should be applied. For example, a public comment card should be developed and handed out. This will allow those who do not want to speak in public to provide their input and also allow additional comments to be made, which were not evaluated at the time of the meetings. After the meeting, all input should be recorded and mailed to the participants for confirmation.

5.2.2.4 Step 3

Step 3: Cultivate a sense of ownership

In order to give the participants a sense of ownership, all the information collected above needs to be reflected physically in the design. Providing the participants a kind of control over their community is the only way to win their satisfaction with the community. (When local residents find their homes and community satisfactory, they are likely to experience a strong community attachment (C. Cook, 1988; Fried, 1982; Glynn, 1981; Hummon, 1992; Mesch&Manor, 1998; St. John, Austin, & Baba, 1986; Zaff & Devlin, 1998).)

Since change will continue in the area, an interested core group of participants should be invited back for a design charrette. Different design scenarios will be discussed and the best design solution will be discovered. Throughout the design process, mini-charrettes will be organized to address more focused issues. According to analysis at step 2, participatory design can have goals in the two areas to improve the environment.

1. Focus on the plazas and then maintain, optimize and renovate their surroundings. For example, for the Yongjin plaza itself, we need to start with the environmental design, which adds more levels and shelters and provides multiple boundaries in which people can rest, matching the atmosphere in the neighborhood. As for Rome Square, it is better to redesign it to match the surroundings. For instance, we can change it to a cultural pavilion or a flower corridor.
2. For the linear spaces between plazas, add more public facilities to improve the popularity.
3. Protect historical heritage, as for single buildings like chenlu, try to publish the major historical facts related to this house. It will be a good landscape feature with cultural importance. As for the historical district, try to keep the quiet atmosphere. It could be remodeled to accommodate a gallery, museum, and cultural spaces, since they are good for both citizens and students at China Academy of Art.
4. Make “water street” (in the Hubin Waterfront area) a meaningful place: by adding more regional architectural detail, setting green plants along the “creek” to make it a natural looking design, and constructing seating facilities to retain people. With some adjustment, “Water Street” can be the town’s specialized attraction.

The design process involves the use of a satisfactory means of communication. Generally speaking, there are two kinds of misunderstandings about medium. Traditionally, participation has relied almost exclusively on verbal interchange. Since, however, so many design issues are related to the visual and spatial effects, alternative media are likely to hold greater promise. Another misunderstanding is to overuse visualization.

In the former reconstruction process, the government tried to adopt the participatory design methodology as well, but they showed the participants exquisite models and almost completed perspectives, and just let citizens vote for them. This is inappropriate. The purpose of the citizens' reaction is not to "vote" on the best of the alternatives. Rather, their input is effective in helping the designer understand the concerns of different user groups. This may well lead to a somewhat different solution than any of the originally-proposed alternatives.

Therefore, we should use the media in the following ways.

1. Create simple models to facilitate the participation process. In Rachel Kaplan's words, "The models used to obtain these photographs were necessarily crude and low in detail. If one takes seriously the notion that citizen input can be useful in the design process, one can neither afford the cost of "beautiful" models nor the time it takes to build them." Kaplan mentioned that people have no difficulty in relating to such relatively abstract material. The lack of detail can help focus attention at the level of input that is needed.
2. Take pictures of the models created. Generate photographs from models of alternative

designs for the site. The approach would involve photographs depicting possible views from Westlake Ave. They have the advantage of providing visual imagery for a situation that will, after all, be experienced visually rather than verbally. The pictures also help participants to read and understand models better. What's more, they have the advantage of providing people with a range of alternative so they can better realize the realm of possibilities. We don't need them to choose which one they prefer. Instead, we are more interested in analyzing and incorporating participants' reactions to the particular models and features represented by the views.

Besides the environmental design, we can also consider using economic methods to help achieve our goals. Tax incentives are a way to promote economy. Unlike traditional approaches to urban and neighborhood development that were based on the master-planning model, policies and action strategies should be linked to physical information, such as land use and building condition. Economic approach is a goal-based planning model, in which policies and actions are derived from social as well as physical information (e.g., client-user goals, census data, and demographic factors). There are many successful examples of using economic methods to guide positive growth.

Incentives and Grants to Revive the Downtown Area

Fredericksburg, Virginia, waived requirements of providing customer parking and initiated a small grants program to help property owners restore regional facades and focus on local products. The incentives were for businesses to relocate downtown and the results were

satisfactory: a downtown with few vacancies and a tourism industry that contribute more than 40 million dollars a year to the local economy, all in a way that enhances the city's unique character.

We can also use tax incentives to improve the popularity and regional characteristics of Hubin's business. Besides traditional products like silk, tea, and handicrafts, we should also focus on the newly emerging local-branded products like clothes, lamps, carpet, furniture, etc. The Hubin business area should not be buried by expensive imported products, since they are beyond regular customers' ability and take away the regional characteristics of this area.

Tax Abatements that Promote the Rehabilitation of Historic Buildings

Vancouver City Council recognized the value of conserving the unique heritage precincts of Chinatown and Gastown in 1971, and requested the Province to designate the lands within the areas as historic sites. On August 1, 2002, Council approved a heritage management plan for Gastown, involving a number of tools to promote the retention and upgrading of heritage buildings. That program included the options of offering property tax exemptions and density transfers off site for redeveloped sites and grants to assist property owners with the conservation of heritage facades.

We could also take advantage of this method to protect those heritage areas in Hubin, like Goushanli. For example, we can offer the following package of incentives to encourage people to lease and update these pieces of architecture of historical interest.

a) Facade Improvement Grant

This would provide 50% of eligible costs up to a certain amount per principal facade for building owners or leasers who are prepared to improve the exterior appearance of their buildings.

b) Property Tax Relief Program

The main objective would be to encourage full upgrading of buildings, thereby ensuring their conservation for the long term while stimulating economic development in the area.

d) Tax Incentives

If the buildings are leased for history-related projects, we will provide tax benefits.

Furthermore, the government can use the administrative method, like providing specific areas to host low-end public business, in order to help create a user-friendly environment.

5.2.2.4 Step 4

Step 4: Foster long-term attachment to the area

How to cultivate the long-term attachment?

People will have special feelings for the environmental design with their investment of time and energy. No longer bystanders, the participants will cherish with the environment as a part of their memory and past experience. This kind of special feeling can be further strengthened to be a long-term attachment. We could use a series of theme activities to

stimulate and maintain the participants' feelings about their design.

1. Historical Heritage and Access

Organize cost-free "I love Hubin" tourism activities regularly and have college student volunteers to guide the participants on tours around this area. This allows the participants to further understand the history, cultural environment, and changes after the PD in this area. Suggestions and feedback are welcomed. The tour should cover the sites of historical interest.

2. Nodes and Paths

Organize theme activities around the squares, such as outdoor movies in Yongjing Square or free visits to West Lake Square.

3. Comfort and Management

Organize volunteers to clean up and maintain the sites and sponsor the free Hangzhou dimsum trial on Sundays.

4. Sociability

Organize regular activities, like Zhejiang opera, taiji or jogging around the Hubin area design sites. As a matter of fact, these activities are self-motivating and popular in the Hubin area nowadays and will have better effects if organized.

After the PD and reconstruction, we will give the participants postcards with New Hubin's pictures. It is both an honor to the participants and a good propagation.

These activities help cultivate the social environment naturally. Social environment is beyond the regional constraints. Bott (1957: 99) argued: "not as the local area in which they live, but rather as the network of actual social relationships they maintain, regardless of whether these are confined to the local area or run beyond its boundaries". No longer a residential area, the Hubin area could establish a strong long-term attachment with these participants by maintaining this social environment. People are not only attracted by the scenery, but also the friends who share their happiness. The culture and the economic life of a society are complicated and ever changing. But the long-term attachments established could link the participants of different areas together and provide them a "sense of community".

Chapter 6

CONCLUSION

The Hubin reconstruction project attained its goal to some extent. It was an important step toward expanding the Hangzhou city and making it a metropolis. Hubin reconstruction made this area the recreation center for the greater Hangzhou area, which attracted many tourists and brought huge revenue to the city of Hangzhou. But the reconstruction focused too much on tourism and business goals and sacrificed part of the real life of the local residents and their sense of community.

In this paper, we suggested the use of a participatory design (PD) method to strengthen sense of community in the Hubin area. In this reconstruction project, one important task of PD is to identify local residents' reactions to the existing project. Combined with the design goals of the professional planners and designers, the residents' idea can be improved upon. Including the residents' views contributes to their sense that community is being continued and not broken up.

While PD received needed attention in an effort to understand the role of the community in design and land planning, I focused a lot on post occupancy evaluation (POE) in this paper. POEs involve qualitative and quantitative researches. It comprises evaluations by specialists and verification of users' needs and satisfaction. Final diagnosis results of the POEs could

be motivations for participatory designs as well as recommendations for case study and generation of information for databank (Ornstein, S. W., 2005) .

POE helps to evaluate the result of the reconstruction. It provides qualitative analysis by observing users' activities and behaviors, taking visual perception of site and interviewing with participants. For example, the whole Hubin area had been fenced for 1 year for reconstruction. Before and during that period, users were not aware of the planned for new appearance of Hubin area. Through site inspection and conversation with Hangzhou residents, we found that this "cover-up" reconstruction method incurred dissatisfaction. It undermined user's visual and emotional connection with Hubin.

POE, as a systematic evaluation, measures built environment from various perspectives, such as economic conditions, environmental comfort, functional and ergonomic aspects. POE helps to make checklists for examining an environment and provide guidelines for future participatory design. In this paper, I evaluated Hubin from seven aspects, and the found-out were used to measure Hubin's sense of community and as references for future PD.

POE and PD are interdependent. The problems found in POE are those we need to solve in future PD process. For example, by POE, we realized that the real estate and rental cost

surged a lot after the Hubin reconstruction. Based upon these concrete data and resident's comment, it was concluded that the price for commodity and real estate in the area is beyond the residents' ability. Therefore we could take certain economic methods to offset it during the future PD process. Another example was that many featured local residential areas got destroyed during the Hubin reconstruction to introduce many so-called scenic spots. This strategy attracted many visitors from different areas, but received negative feedbacks from experts and residents. The result of POE was totally beyond the government's expectation, and pointed the direction for future improvement. In summary, the objective for POE is to identify the problem, while the goal for PD is to solve the problem.

Participatory design is an approach to design that attempts to actively involve the end users in the design process to help ensure that the product designed meets their needs and is usable. Therefore, if local residents and business people are involved in a PD process there is a high likelihood that the follow-up POE will show greater acceptance by the locals.

PD is not equal to POE, though they both require evaluation. For POE, evaluation is the ultimate goal, while for PD it is just a method. The ultimate goal for PD is to solve the problem identified in POE. This paper includes not only POE but also explains how adopting the participatory design method would help strengthen the sense of community for this area.

PD provides not only a platform for communication between designers and users, but also a process to link people together. On one hand, it gives rise to users' attachment to design sites; on the other hand, it strengthens the relations between participants and therefore strengthens the sense of community psychologically. This is especially important for the Hubin area, with a large relocation of residence. So we discussed the appropriate sampling process in this participatory design and listed four major steps that contribute to the success of this participatory design. We also provided constructive suggestions for many problems, for example how to change the physical environment, how to make the economic structure of this area more reasonable by economic method and how to stimulate the long time attachment to the Hubin area.

China's economy is booming, thus launching many new reconstruction projects. City reconstruction is usually a method of updating an old city. But currently some methods and processes adopted are inappropriate. Taking only governments, developers and designers into account, some current reconstruction projects proved to disagree with public interest: they undermined city spirits by destroying historical and cultural heritages.

PD, as a design approach that aims to actively involve the end users in the design process, not only protects the public interest, but also maintains the uniqueness of individual cities. If the Chinese government puts more emphasis on PD and provides more participation and evaluation opportunities, we believe it could provide better experience for city regeneration.

The PD steps offered in this paper are more in the sense of hypotheses, both to stimulate research and to serve as preliminary considerations to help get the process underway.

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APPENDIX

PHONE INTERVIEW TOPICS

1. Are you satisfied with the reconstruction design between Hubin and Nanshan road? Any suggestion for improvement?
2. Which part do you like most?
3. Which part do you dislike most?
4. Do you feel you have certain kind of connection with Hubin? Why?
5. Will you spend your money/time here (Having dinner, enjoying tea, shopping, etc.)? If not, who do you think will do so here?
6. Do you feel we have enough cultural atmosphere here? Any cultural heritage that we need to recover?
7. Do you believe the China Academy of Art, located in NanShan road, should affect the function of this area?
8. Do you like the environment of the "Bar Street" in Nanshan road? Do you visit these bars frequently? If so, how often and when do you go there?
9. Do you prefer the "Bar Street" atmosphere or the culture heritage of this area?
10. Do you like to stay in Yongjing Square? Why? Do you like Rome Square? Why? Do you like West Lake Square? Why?
11. Do you like the new creek between the newly constructed buildings in Hubin road? Why?
12. Without considering the economic factors, do you prefer to own a house here or else where? Why?
13. In this area, which missing facility is most wanted?
14. What kind of activities do you usually do beside the West Lake?

15. Do you feel safe in New Hubin?
16. Is it convenient to access public buildings or facilities along the lake?
17. How many traffic signals need adjusted timing along New Hubin to improve pedestrian access?

QUESTIONNAIRES

Hangzhou Hubin Waterfront Evaluation

(Please circle one or more choice)

1. How often will you come to Hubin this year?
 - a. Once a year
 - b. Less than once a month
 - c. More than once a month
 - d. Other _____
2. When do you usually spend time in the Hubin area?
 - a. Early Morning
 - b. Morning
 - c. Afternoon
 - d. Evening
 - e. No regular time
3. How do you travel to this area?
 - a. Bicycle
 - b. Walk

- c. Bus
- d. Drive
- e. taxi

4. What is usually your primary reason for coming to Hubin?

- a. Sightseeing
- b. Shopping
- c. Working there
- d. Restaurant/Entertainment
- e. Exercising
- f. Staying at the bar
- e. Other _____

5. Do you usually travel alone or with someone else?

- a. Family
- b. Friends
- c. Other _____

6. Have you often met friends here? If so, are you both attending certain activities?

- a. Yes
- b. No

7. Do you feel you have certain kind of connection with Hubin? Why?

8. Does Hubin embody the characteristics of Hangzhou? How?

9. What do you like best about Hubin?

10. What do you like least about Hubin?

11. Do you feel safe in New Hubin?

11. What do you think would be the most desired change in the Hubin area?

- a. Sense of history (Protect and use the buildings of historical interest)
- b. Sense of culture (More space to demonstrate Hubin's culture)
- c. Sense of art (More artworks like fountain/sculpture/other _____)
- d. More connections with the West Lake (More areas to look out to the West Lake, More direct access to the lake, More water-involved activities)
- e. More recreation activities (such as _____)
- f. Access to the architecture in the Hubin area
- g. Parking
- h. Tea/coffee shop /restaurants /retail nearby
- i. More facilities (fountains/bench /lighting /signs /restrooms/bicycle rack/traffic light)
- j. Other _____
- l. Other _____

12. You are: a. Under 18 years old a. Female

b. 19-29 yeas old b. Male

c. 30-60 years old

d. Over 60 years old

13. How long does it take for you to travel to this area?

a. < 20 minutes

b. 20-40 minutes

c. 40-60 minutes

d. > 60 minutes Spokane county