A study on Community Greenways of Haizhu in Guangzhou from the perspective of Everyday Urbanism

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Abstract

The greenway has become more and more popular all around the world and greenway construction in China is represented by Guangdong Province. As a type of greenway in Guangzhou, the community greenway refers to greenways that connect community parks, pocket parks and green spaces, mainly serving nearby communities. However, whether the community greenways match the daily urban life of the citizens has not been given enough attention within a few years after the completion.

We aim to analyze whether the top-down strategy matches the daily life of residents, from the perspective of everyday urbanism. We studied the case of Changgang Community Greenway in Haizhu District, the downtown area of Guangzhou from the top-down view and the bottom-up view according to Post Occupancy Evaluation (POE). Methods that we used include literature research, site observation, questionnaire and structured interview. The result shows that, from the top-down view, the aim of community greenways itself is to serve the residents. While from the bottom-up view, lots of survey participants are not so satisfied when talking about the specific content.

Keywords: Community greenway, Everyday urbanism, Urban greenway, Everyday public space, Public activity, Self-organized activity

Introduction

With the rapid expansion of the city and the construction of gray infrastructure, the green space gradually becomes unable to meet the growing demand for recreation in fast-paced life. In this context, the greenways are introduced into urban planning and landscape design to serve as a connection between residents and urban open space (Shafer, Scott & Mixon, 2000). Since 2010, the Pearl River Delta in Guangdong Province of China has set off the movement of greenway construction. According to the grade and scale, the greenways are divided into regional greenways, urban greenways and community greenways. Among them, the community greenways are the "capillary" (ZHOU & SHENG, 2010) that connect pocket parks, street green spaces, having the closest relationship with nearby community.

Nowadays, the greenway movement has finished for a few years, while the effect and use status of community greenway construction have not been given enough attention. In this article, the authors studied the case of the Changgang Community Greenway in Haizhu District, downtown of Guangzhou, the capital city of Guangdong Province, through Post Occupancy Evaluation (POE), based on Everyday Urbanism. We studied how the community greenway matches the daily life and how it interacts with residents, and discuss strategies for improving green space accommodation and enriching daily urban life.

Background and Literature review

In recent years, environmental issues and urban expansion have triggered the thoughts of sustainable communities and quality of life. Greenways cannot be ignored in the development of sustainable communities. Through studies, residents generally believe that the quality of life has been improved with the construction of greenway, mainly because of the reduction of pollution, the improvement of the natural and social environment (Shafer, Lee & Turner, 2000). At the same time, the greenway enriches the lives of the residents. For example, residents can exercise, relax and interact with the neighborhood in the greenway. They can also go to the surrounding destinations (such as parks, restaurants, shops) through the greenway (Keith, Larson, Shafer, Hallo & Fernandez, 2018). In general, greenways have improved the lives of residents, and the impact of greenways on residents' lives depends on a variety of factors. Some studies have shown that distance and accessibility from home are the most important factors that affect the frequency of residents using greenways (Akpinar, 2016). In addition, the age of the surrounding residents is also an influencing factor (Palardy, Boley & Gaither, 2018a, 2018b).

Previous studies show that most of the researchers analyze the use and evaluation of the greenway from the perspective of the greenway as a leisure space. However, this paper takes a new view that the community greenway is an everyday public space, that the relationship between residents and community greenways is not only in leisure, but also in daily traffic, communication with others and even daily activities just in front of the house. Therefore, this paper analyzes the relationship between community greenway and people's daily life from the perspective of Everyday Urbanism. Everyday urbanism emphasizes the role of daily life in public space. Specifically, they emphasize the combination of top-down planning and bottom-up transformation. The so-called top-down strategy is the application of the sophisticated knowledge and techniques. The bottom-up is tactic. That is the diverse use of space or even partial transformation (Chase, Crawford & Kaliski, 2008). By applying Everyday Urbanism to the analysis of community greenways, we can not only find gaps between planning and the real daily life of residents, but also can we see how the behaviors of residents can make up for the professional knowledge of designers.

Methods

Study site

The selected community greenway is in Changgang Street, Haizhu District, the downtown of Guangzhou. It is distributed along Machong River (Fig.1), a tributary of the Pearl River. This community greenway is a branch of the urban greenway network. Along the greenway are communities, city squares, parks, cultural relics, etc. The survey area is in the most densely populated area of Haizhu District, and the selected part is about 2km long in total. The communities along the greenway are diverse in the aspect of density of population. There are crowded urban villages and also new built communities with relatively low population density. The selected area has an average population density of about 50,000 people/km^2. The greenway has been repaired many times on the basis original riverside path and the width of the greenway ranges between 1.5 and 5m. The last construction was completed in 2017.

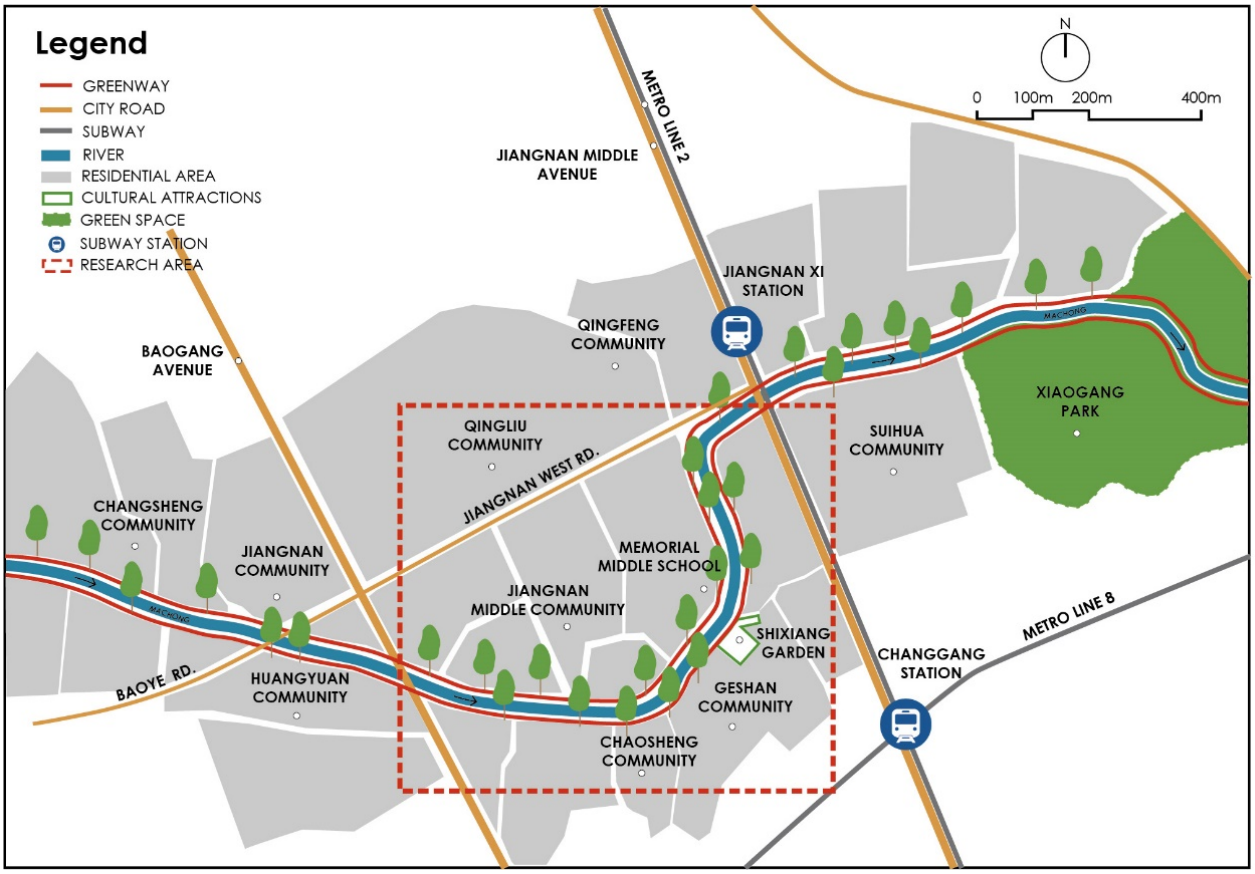

Fig. 1 Maps of the Changgang Community Greenway, Part of the Greenway in Haizhu District, Guangzhou (Source: Author's own map)

Survey methods

The author first interpreted the government's planning ideas through literature research, including the principles and specific construction content of community greenway, and analyzed the aspects that the government emphasize in the planning of community greenways. Then, the study was carried out under the guidance of the Post Occupancy Evaluation. We used a variety of field survey methods, including site observation, questionnaire survey and structured interview.

In the site observation section, the author selected the investigation time by stratified sampling, which was during 10:00-11:00 and 14:30-15:30 on January 22nd, 2019, during 19:30-20:30 on January 23rd and during 10:30-11:30 on January 27th. The investigation covered both the weekday and the weekend. In the site observation, we recorded the characteristics of the site and the behavior of the user and summarized the influence of the space type on the user's behavior (Marcus & Francis, 2001).

In the questionnaire section, in order to study the residents' demand for community greenways, the author used the Likert scale to set up the questions of the survey, combined with the planning guidelines and the concept of daily urbanism. Firstly, the participants were required to rate the importance of the construction content (9 items, 5=very important, 1=not important at all). Then the participants were asked to score the status of the community greenway (7 items, 5: very satisfied, 1: not satisfied at all). In order to understand the demographic characteristic of the survey area, participants needed to provide information of gender,

age, occupation, education. For the analysis of the questionnaire, we first removed the questionnaires with missing answers and finally got 87 valid questionnaires in the 100 questionnaires. The data was analyzed in SPSS 19.0.

Results

Analysis of guidelines for community greenway planning

Community greenways are built to connect urban communities and serve the lives of residents (LAI & ZHU, 2012). The construction of community greenways follows the general principles of the Pearl River Delta Greenway Network Planning, namely ecology, localization, diversification, humanization, facilitation and feasibility (ZENG, Ma, Guo, Gao & Zhan, 2010). From the principles above, we believe that the construction of community greenways itself is a practice of everyday urbanism, that is, giving more attention to daily life. In view of this, the government has consciously incorporated daily life into the design, while whether these considerations are the true will of the residents, in addition, what other needs of the residents depends on the evaluation of residents still need to be deeply studied.

Fig. 2 The depiction of Changgang Community Greenway (Source: Author's own photograph)

Site observation

From the perspective of Everyday Urbanism, we have stated that the community greenway is "everyday public space". Because the community greenway is an important path for residents to go to the surrounding places, also the space for leisure. Everyone going outside of the house would intentionally or unintentionally become part of the community greenway. Some people just pass by, others stop, and some even forget the boundary between public activity and private life. They would expand their living space to the community greenway. From this point of view, the community greenway is the link between public activity and private life.

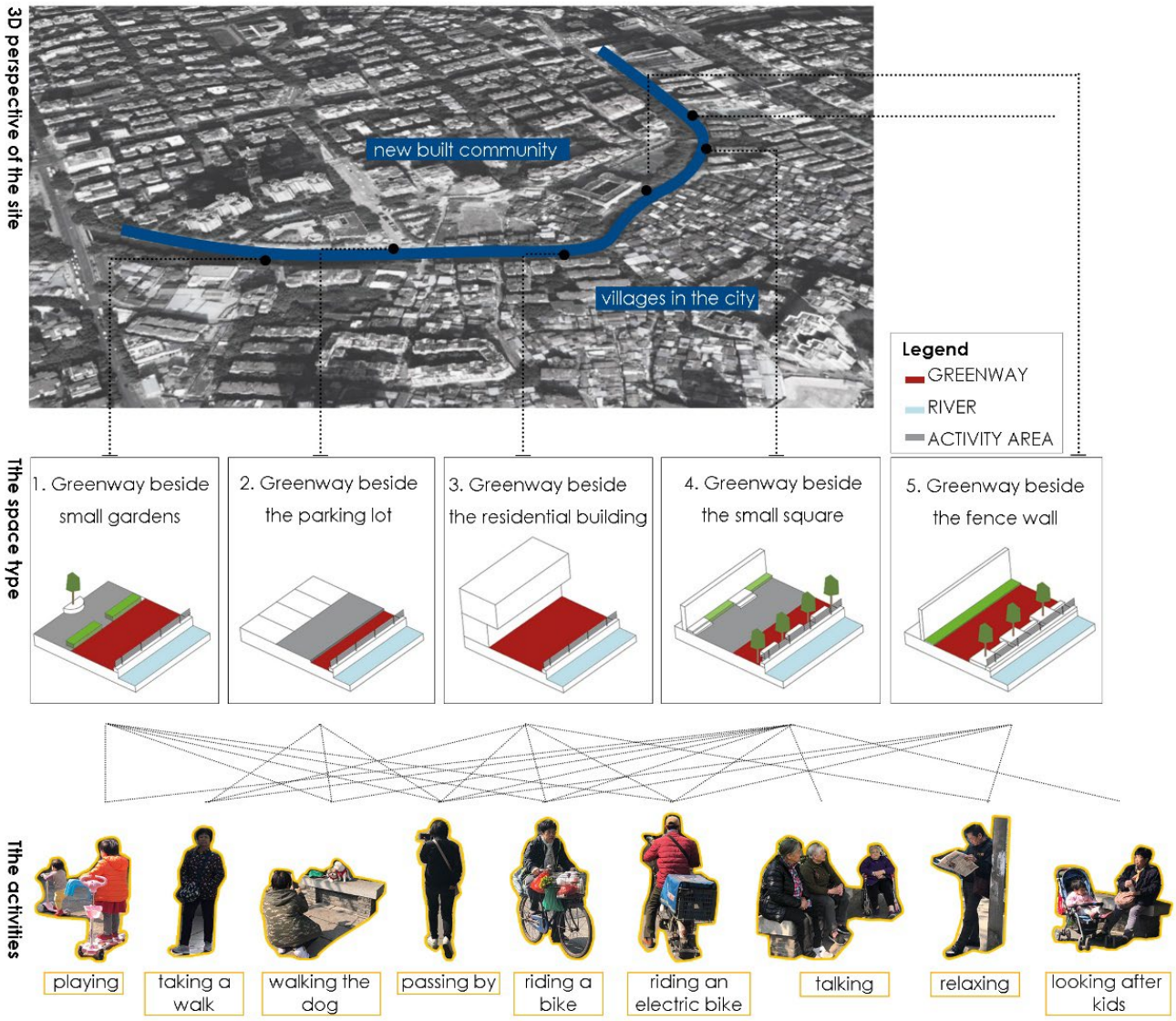

Fig. 3 Mapping of the greenway space types and public activity in Changgang Community Greenway (Source: Author's own map)

Affected by the scale of the site, different small spaces are formed along the community greenway and affect the way people use it. Therefore, the author used the method of typology to classify the green space into five types in Changgang Community Greenway and pointed out public activity in each type (**Fig.3**). The most common one of the five types of space is the greenway space adjacent to the outer wall of the community. The width of the greenway is about 2m, separated from the outer wall by a narrow green belt, and there is no bench. The activities are relatively simple, most residents just take it as a transportation way and would not stay. The second type is the green road with small square by side. There are benches along the river bank. This is the space where people like to gather together. Residents like to sit and relax by the river, or chatting with neighborhood. The square is mainly the space for children to play during the daytime. There are people doing physical exercises such as badminton in the square but there are potential conflicts between the bikes and the leisure people. The third type is the greenway space close to the

residential building. The door of the resident faces the greenway, and the greenway is about 5m wide. As there are no supporting facilities, most residents do not stay here for leisure. Besides, the speed of non-motorized vehicles is usually higher than in other space types of the community greenway. The fourth is the greenway space next to the parking lot. The greenway itself is only 1.5m wide, but people "occupy" the parking space as expansion space, to do physical exercise, child care and other activities. The fifth type is the green road combined with gardens. The greenway is a public passage and leisure space, and the interior of the garden is a relatively private space due to the shelter of the greenery. People like to have quieter leisure activities in the garden, such as reading newspapers, or walking the dog. The fifth space is connected in series through the greenway, and different public activities are also connected.

In addition to the regular public activities, there are also unconventional public activities and private life in the community greenway (Fig.4). We refer to these as the self-issuance of residents. For example, people use the corner space to carry out commercial activities like haircut. In the scope of investigation, there are two haircut corners formed by residents spontaneously. The residents take out their own desks or stools or directly use the existing stone of the site to form a working environment. The haircut corners are very popular among residents and there are always several people waiting for haircutting during the day time. The houses facing the greenway try to expand the living space. People put their flowers and discarded tables and chairs next to the greenway, transforming the public green road into a warm corner of their own, and forming a space for neighborhood communication.

Fig. 4 The self-organized activity in Changgang Community Greenway (4a. Flowers raised by residents outside their homes; 4b. Haircut business in the corner the greenway; 4c. Quilts along the greenway) Source: Author's own photograph

Questionnaires and Structured interviews

For the demographic characteristics (Table.1) of the participants, the ratio of male to female is close to 1:1. For different age groups, the group with the largest population is the youth group of 18-40 years old, accounting for 47.1%. The active population over 55 years old is also a large group. Considering the legal retirement age in Chinese companies is 60 years old for males, 50 years old for female workers, and 55 years old for female professionals and managers. It can be assumed that such people represent retired groups. From the occupational part, it can be seen that the number of retirees is over 55 years old. The division of occupation draws on one of China's most popular social class division theories—the ten-classes theory (LU, 2003). From the results, the community greenways do not cover three of the occupations (national managers, business owners and farmers), and involve all of the rest. From the perspective of education level, most participants are middle and high educated.

Table. 1 Demographic Characteristics of the Changgang Community Greenway Users

	Results(n=87)
GENDER	%Distribution
male	50.6
female	49.4
AGE GROUP	
18~40 years	47.1
41~55 years	24.1
55~65 years	20.7
>65 years	8.1
OCCUPATION	
Middle and senior managers in the enterprise	3.5
Specialized technical staff	2.3
Government staff	2.3
Individual industrial and commercial households	14.9
Business service staff	11.5
Worker	4.6
No occupation	2.3
Freelancer	6.9
Retired staff	31.0
Student	20.7
EDUCATION	
Junior high school or less	19.5
High School/Secondary technical school/ vocational high school	38.0
college/Bachelor's	42.5

In the evaluation of the importance of community greenway principles (Table.2), to meet the needs of different groups of people, especially the needs of the elderly and children scores the highest (4.62), followed by facilities such as signage, sports facilities, and benches. Residents are also very concerned about the ecology, and 86.2% believe that ecology is important. Residents are also concerned about whether there is sufficient space on the greenway, and the scores of the remaining principles have no significant difference.

Table. 2 The Residents' evaluation of the importance of the community greenway construction principle

Items	Mean	SD	Response distribution	
			%Extremely Important	%Important
Close to home, better within 5 minutes	4.06	1.004	40.2	32.2
Connected to other greenways	3.98	0.988	39.1	23.0
Connected to squares and parks nearby	4.06	0.932	42.5	27.6
Connected to heritage sites, famous city marker, commercial streets	3.93	0.998	37.9	32.2
All kinds of facilities such as signage, sports facilities, benches	4.53	0.696	62.1	28.7
Meet the needs of all groups of people, especially the elderly and children	4.62	0.555	65.5	31.0
Protect the original vegetation and roads, improve river environment	4.47	0.760	62.1	24.1
With enough space for activity	4.32	0.770	49.4	35.6
Reduce conflicts between different activities through time-arrangement	3.93	1.021	41.4	17.2

The evaluation of the status of the community greenway shows a large fluctuation in the scores (Table. 3). The participants are generally satisfied with the overall situation of the community greenway. It is believed that the community environment has been significantly improved after the completion of the community greenway, with 4.05 points. Overall, community greenways are suitable for everyday leisure and transportation (4.02). However, for the specific items, the residents are not so satisfied. The most dissatisfying one is that the government did not communicate with the residents actively (2.94), and the residents believe that their opinions have no chance to express. Besides, 57.5% of the residents hold the opinion that the facilities do not meet their needs well. In addition, although motor vehicles are not allowed in the community greenway, 50.6% of the residents still believe that the traffic is too much interfered, which is mainly because the speed of the electric vehicle is too fast. And there are 49.4% of the participants thinking that the community greenway has insufficient activity and communication space.

Table. 3 The Residents' evaluation of the status of the Changgang Community Greenway

	Mean	标准差	Response distribution	
			%Extremely satisfied	%satisfied
After the completion of the community greenway, the living environment has improved a lot.	4.05	0.776	31.3	43.68
The government actively communicates with residents before the construction.	2.94	1.270	18.4	17.4
The community greenway is suitable for leisure and transportation.	4.02	0.731	27.6	49.4
The community greenways has few vehicle interference.	3.51	0.963	17.2	32.2
There are enough activity and communication space.	3.51	1.022	18.4	32.2
Community greenways have complete facilities such as sports facilities, and benches.	3.38	1.026	17.2	25.3
The community greenway serves all groups of people, especially the elderly and children	3.83	0.879	26.4	34.5

Discussion and Conclusion

Now let's return to the analysis of the relationship between top-down strategy and bottom-up tactic. For the strategy, it can be seen from the planning files that the construction of the community greenway is firstly considered from the completion of greenway network of the city. In the construction, it has the basic aim to facilitate the daily needs of the residents. Thus we can conclude that the original intention includes the basic idea of everyday urbanism, that is, to care the daily life of residents. From the perspective of the bottom up view, the residents care more about diversification for different groups of people (4.62), humanization of facilities (4.53), the aspects close to daily use. It is generally believed that the completion of the community greenway has improved the living environment of the residents (4.05), but it must be pointed out that the community greenway still lacks considerations in details. For the lacking, the Residents solve some conflicts and improve the construction through simple tactics. These tactics are the spirit of the community greenway, that is, the integration with the daily lives.

The results of the study have potential use in resolving conflicts between strategy and tactics. Here we summarize the corresponding strategies to make the community greenway meet the daily needs of residents better:

(1) The construction of community greenways should actively communicate with residents. The community greenway is closely related to the lives of the residents. Therefore, the opinions of the residents can be absorbed to ensure that the community greenways truly serve the residents;

(2) Divide spaces for different use. Most of the current conflicts are caused by the overlap of the activity spaces. So that separated spaces can effectively solve these problems;

(3) Enrich the function of community greenways. Community greenways should meet the needs of different groups of people, so they are required to have different functions and provide opportunities for different groups of people;

(4) Encourage the spontaneous transformation of residents. Designers tend to ignore the subtle needs of the residents. At this time, residents can play through themselves, not only to improve the function of the venue, but also to reflect the "everyday life" in the venue.

In the greenway network, the community greenway is the most closely to the residents. The government are considering more about the daily life but the planning does not match the daily life well. For the inadequacies of community greenway, residents use tactics to improve the function of community greenways. To sum up, only when the top-down planning is unified with the bottom-up self-issuance of residents, the community greenway can truly respect daily life and show the charm of life.

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