RESEARCH ON SOUNDMARK OF CITY SOUNDSCAPE

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Soundmark is an important element of soundscape, this research aims to find and collect the city soundmarks in some areas of Zhaoqing city, and analyze people's understanding of these soundmarks. The methods of soundwalking, on site survey and questionnaire are used to understand and explore people's sense of approval on soundmark, as well as the significance of soundmark in urban design. The study results show that the soundmarks in the city is not changeless: the urban designer must also consider the change of soundscape in the same time of space design. Furthermore, Soundmark is closely related with people's knowledge of city history, "the sound of memory "is frequently mentioned by visitors, showing that the soundscape not only corresponds to the real space but also has the characteristics to continue in people's mind.

1. Introduction

City soundscape is a part of the urban physical environment, and it will help to improve the environmental quality in urban areas by raising people’s awareness of city soundscape \(^1\). The analysis on the environmental soundscape in typical urban areas can be used to improve the urban design \(^2, 3\).

Soundmark is an important part of soundscape science, this study aims to find and capture the soundmarks in lots of typical sound environments and areas of a city, and analyze people's awareness of these soundmarks. As the sound with site characteristics, soundmark is the unique marking of dominant soundscape feature which can be a natural sound or artificial sound, such as geyser and waterfall, as well as the sound of bell and other traditional activities. Its determination generally requires visiting local residents or people who have worked for a longer time in these places \(^4\).

2. Study areas

Zhaoqing City is located in south China, Xijiang River and the continuous Northridge mountains are spread in northern and southern sides of the city. The city extends like a belt. The famous scenic spot "Star Lake" is located in the downtown area. We have carried out study on six typical locations: Star Lake, Luoyin ferry, Xijiang River pier, Songcheng historic district, Chengdong park and Paifang Square.

3. Method

The collection of sound data was completed by a group of our students in 6 selected typical areas of the city in December 2013, they conducted a number of targeted surveys in these places for
one month, and found out people’s acceptance of soundmark as well as the sense of soundmark in urban design through the methods of soundwalk, interview, questionnaire and other ways.

The students were asked to walk in routes with different city soundscape features, focused on listening experience, observed the around urban environment while walking, and listened carefully to the sounds around them. In each study area, the first was to assess the overall impression of the soundscape, and then recorded with use Sony PCM-D50 recorder, and finally interviewed and made survey on the surrounding crowd.

A comprehensive visual and auditory analysis should be emphasized in the investigation of the status. First, we should record and study the existing sounds, and master the existing background sound on the site, judge the sound sources which constitute the sound, where they are respectively from, and how far from those subjects. Second, we should determine the sounds are natural or artificial, which ones are special, which ones have site characteristics, which are tedious and noisy. Comprehensive and thorough interviews and surveys should be conducted to the history sound, culture sound, people's association sound and memory sound which have accumulation of particular geographical inherent assets and value. Analysis should also be made on people’s psychological effects so as to see what feelings have been brought to people by hearing the sounds, whether it can cause changes in human psychology, it is pleasant or annoying, and finally explore and grasp the main reasons of formation and the main reasons to hinder its development.

The final soundmarks of the 6 six scenes are listed as follows:

1. The human sound at Star Lake, especially the local Cantonese dialect
2. The water sound at Luoyin ferry
3. The sound of steamboat at Xijiang River pier
4. The chess and card entertainment sound at Songcheng historic district, some are soundmarks of business activities, such as people drum up business
5. Mechanical amusement sound at Chengdong Park
6. Music and fountain sound at Paifang Square. These soundmarks of these soundscapes all revealed the ways how people get along with the environment, only harmony could generate a good sound ecology.

4. Conclusions

The study aimed to find out people’s acceptance of soundmark as well as the sense of soundmark in urban design through the methods of soundwalk, interview, questionnaire and other ways. The results showed that the soundmarks in city were changeable, the urban designers must also consider soundscape changes at the meantime of space design; the soundmark is closely related with people’s understanding and identify of the city's history, many "memory sounds " were mentioned by subjects, showing the soundscape not only corresponds to the real space, but also has a continuity in people's sense.

Conclusions are summarized as follows:

A. The local language - the "local accent" in the city is the soundscape in great need of protection. In the planning and design of residential, commercial and public regions, attention should be paid to providing people with intimate sound environment.

B. As the old historical neighborhoods are pleasant to live to some extent, many residents will gather in the street and play chess and cards at some wide places, which make the street have the function of public space and bring the soundscape which is closely related with the local life, the soundscape in memories has been mentioned several times, so the local historical and cultural characteristics should be kept in urban design.

C. The commercial activities in historic districts have their own characteristics, "market place" is an important part of the historic districts, the soundscape of "market place" sound reflect
the vitality of neighborhoods, and can better reflect the local characteristics of "market place" the development of "tourism" in the activation of blocks.

D, The coast of West Rive has a very unique soundscape with the tranquility of old ferry and prosperity of new marina, however, it is often overlooked by most people, thus attention should be paid in urban planning and design.

E, The urban tourist attractions bring people beautiful natural environment, but the sound emitted by people in the process of visiting is obviously more prominent, and exactly forms an important part of urban vitality

In the historical process of human civilization development, the sound is an important element to witness and record the change of times, social progress and civilization continuity. It is a memory; part of the city will disappear if they are gone. Concern about the sound culture environment is same as the concern about our natural environment.

In conclusion, the study on the soundmark of soundscape indicated that the city is developing and changing, urban conservation and update are necessary, soundscape is a true reflection of urban life, the changing soundscape contains a lot of information, what the current urban planning and urban design need is not to "make landscape" or "make soundscape," but to create an environment with specific soundscape, and develop in change based on people-oriented principle.

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REFERENCES