

Effects of Soundscape on Place Attachment in International Scenic Resort

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Introduction

Term Definition

Soundscape: all sound sources perceived by an individual, group, or community in a given context. while noise refers to unwanted or disruptive sounds within that environment.
Place attachment: an emotional connection established by people in a specific area. Its evaluation includes two main dimensions: place identity and place dependence

Background

As an important carrier of people's perception, soundscape has unique advantages over visual landscape in shaping place culture, fostering sense of belonging, and establishing emotional connections with specific locations. Evidently, there could be an important correlation between soundscape and place attachment, yet there are few related studies on this subject. Therefore, this study chose Kulangsu, which is both a residential and tourist area, as study site to investigate the correlation between soundscape perception and place attachment, and further consider the influential role of group factor by means of questionnaire surveys and field investigations.

Methods

Case study site

Kulangsu Island is located in Xiamen, China, with a total area of about 1.8839 square kilometers. Kulangsu Island is also one of the most popular tourist destinations in China, attracting six million visitors annually, with its unique natural landscapes, well-preserved international architectural heritage, and rich soundscapes.

Soundwalks

A five-day period to identify the main sound resources and representative research samples.

Questionnaire

There are three main parts consist of the questionnaire: social and demographic factors, perception of sound sources, and measurement of place attachment.

Data of questionnaire

In total, 195 questionnaires were completed and deemed valid in 5 presentative research samples (Figure 1).

Soundscape Characteristics

As Figure 2 shows, natural and mechanical sounds were mostly desired, while the perception of folk activities, music, and conversation sounds among artificial sounds should be regulated and controlled

Place Attachment Characteristics

As Table 1 shows, people have a high degree of place attachment to Kulangsu Island, among which place dependence is stronger than place identity

Correlation Between Soundscape and Place Attachment

Place attachment is related to the perceived frequency of natural sounds, and the preference for music sounds and guided tour sounds. Figure 3 shows the significant difference between residents and tourists groups, the bigger arrow shows a stronger correlation.

Conclusion

The development of place attachment is notably influenced by the perception and presence of sound sources. However, the specific sources of sound that impact place attachment vary between local residents and visitors. For residents, their attachment to a place is significantly influenced by natural sound sources, whereas visitors' attachment ratings are notably influenced by artificial sounds.

Acknowledgement

This work was supported by China Scholarship Council (grant number: 202008350140).

Reference

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Results

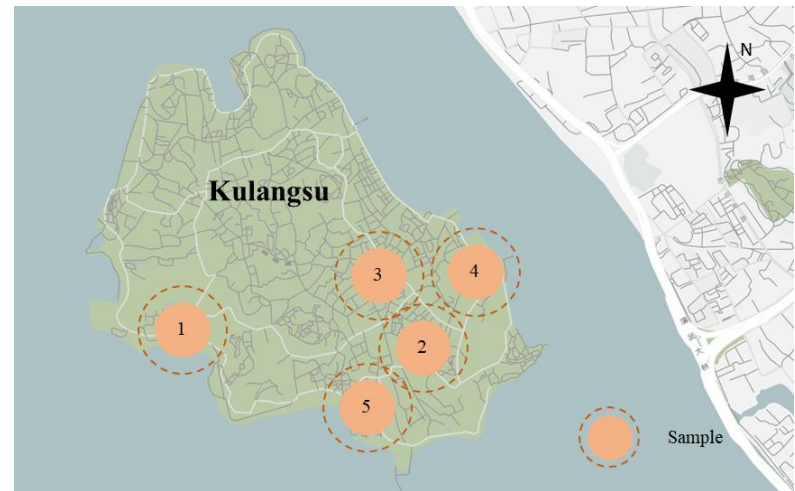


Table 1 Mean values of place attachment, place identity, and place dependence

| | Average | Standard deviation |
|------------------|---------|--------------------|
| Place attachment | 3.79 | 0.627 |
| Place identity | 3.70 | 0.703 |
| Place dependence | 3.89 | 0.660 |

Figure 1 Distribution of representative research samples

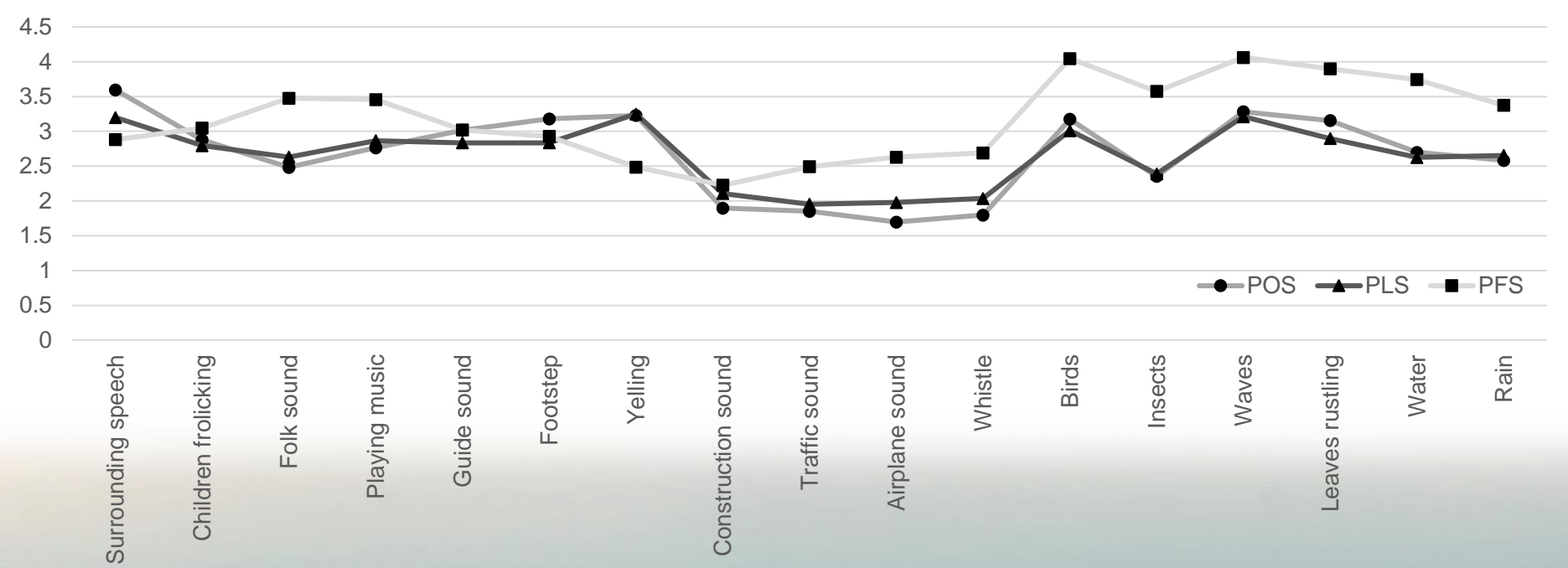


Figure 2. Mean values of the individual sound perception indicators, i.e., perceived occurrences (POS), perceived loudness (PLS), preference (PFS)

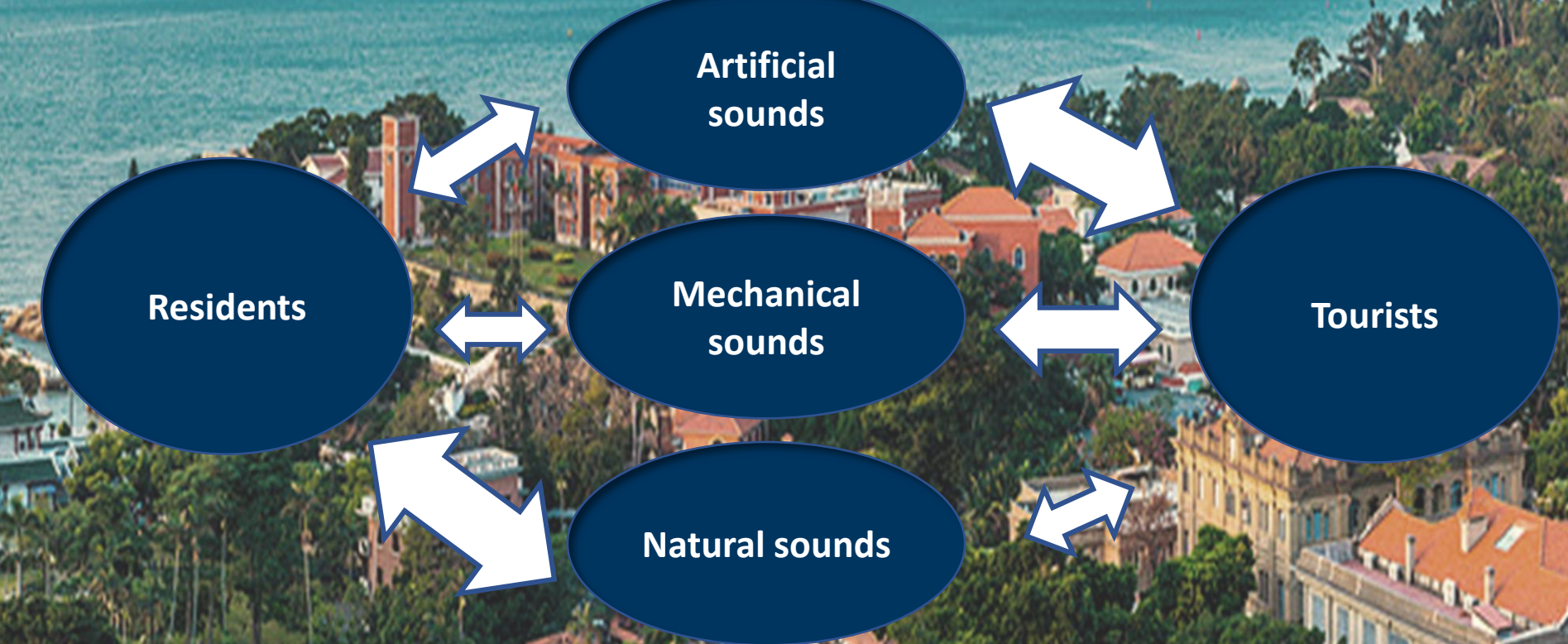


Figure 3 Correlation between place attachment and soundscape