

## **Soundscape and the Built Environment**

Jian Kang and Brigitte Schulte-Fortkamp, Editors  
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This book is an excellent addition to the literature on soundscape studies. The book contains ten chapters and has twenty-six authors. The two editors have done an excellent work in putting together the book.

Generally, the term soundscape indicates a study of environmental acoustics. However, this work is the first book that presents systematic discussions of various aspects of soundscape in built-up environments.

In Chapter 1, a general discussion of acoustic environment and soundscapes including a classification scheme for categorizing sound sources is given. Also it is emphasized that soundscape as a part of the living environment can partly be measured and described by physical quantities.

The Chapter 2 explains important roles of various aspects such as auditory scene analysis, listening modes and attention focusing along with attribution of meaning to individual sounds. A deeper understanding of soundscape through interaction schemes and models is presented.

Chapter 3 discusses the impacts of soundscape on health benefits such as human well-being, quality of life and restoration, along with economic perspectives are discussed.

Chapter 4 deals with important topics such as human perception as a guidance of soundscape, the soundscape approach, approaching people's mind, soundscape analysis and the perception of sound quality.

Analysis of large-scale data on perceived soundscapes from several Dutch and Austrian surveys is described in Chapter 5. Also included in this chapter is the study of inter-correlations between acoustic dimensions, perceived soundscapes and non-acoustical factors.

Chapter 6 describes the necessary roles of binaural measurement technology and psycho-acoustics in soundscape investigations.

Chapter 7 presents interesting, informative and new mapping techniques for soundscape that can be used to aid the design and planning process. The various techniques in this chapter include soundscape mapping based on human perception of sound sources, soundscape perception mapping developed using artificial neural networks, psychoacoustic mapping and mind mapping, and mapping of noticed sounds.

The Chapter 8 explores approaches to urban soundscape management, planning and design. It focuses on soundscape planning and presents soundscape design guidelines.

In Chapter 9, another interesting topic, namely "soundscape as part of the cultural and natural heritage", is explored. Importance of soundscape in addition to visual-scape of a cultural heritage is discussed. Also recognition techniques and applications of soundscape as an intangible trademark are presented.

Finally, exemplary case studies of applied soundscape practices are outlined in Chapter 10. It is from these case studies that conclusions can be listed and discussed which further can be used to draw guidelines for better soundscape practice in future projects. Each chapter of this book in its beginning has listed clearly the contents with subtopics. The figures, tables and photographs in all the chapters throughout the book are very clear and highly readable. Each chapter provides an exhaustive list of references. In summary, this is an excellent book highly recommended for professionals, consultants, researchers, students and administrators in variety of fields such as acoustics, architecture, landscape design, building science and technology, urban planning, transportation engineering and environmental science.

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