Title: The measurement of soundscapes – A study of methods and their implications

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Abstract:

The perception and assessment of acoustic environments is still the object of investigation in numerous scientific studies and experiments. In this context the soundscape approach gains in significance and is frequently applied with respect to basic as well as applied research. Moreover, first steps are taken to standardize parts of the soundscape approach, namely first the definition of soundscape and its conceptual framework (ISO 12913-1:2014) and as a second step the data collection and reporting requirements (ISO/DIS 12913-2). Since there is a broad diversity of methods and tools used to collect data in soundscape studies, the determination of the most adequate measurement approaches is lively discussed. The potential soundscape methodologies range from non-participatory observational methods over narrative interviews to simply collecting few category scale ratings. Only one point is beyond question, the soundscape data collection has to be carried out in the original, real world context preserving the natural response to the respective acoustic environments.

The paper presents current data collection methods and tools used in soundscape studies and discuss their methodical implications. Moreover, the results of pilot studies addressing these potential implications are shown and discussed in detail.