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A corpus-based approach to define Turkish soundscapes attributes

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Considering the challenges of translating soundscape attributes, this study aims to identify soundscape attributes in Turkish. To conduct this study, an online questionnaire with two parts was prepared and sent to 200 native Turkish bilingual speakers from all around Turkey. In the first part, the participants were asked to translate the eight soundscape attributes in ISO 12913-2:2018 from English to Turkish. In addition to direct translations, the participants were asked to describe the acoustic environment they were present in with five perceptual adjectives in their own words. The adjectives from direct translations and the open-ended question were combined to form a pool of 196 adjectives. Through a two-step elimination process by six soundscape experts, a total of 80 attributes were obtained. Twenty-four binaural sound recordings, using a 3Dio binaural microphone and Zoom H4N recorder, were collected from indoor and outdoor public spaces with different functions (e.g., concert hall, masjid, design studio, cafe). Each participant was asked to listen to six 30s-long sound recordings one at a time and rate the 80 attributes on a five-point scale for each recording individually. The results show that the opposite adjectives with similar perceptual meanings were placed together in two main clusters.

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