
Auditory affordances - the role of action in perception of urban soundscapes

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Abstract

Throughout evolution, the auditory system has specialized to detect, localize, and identify significant events in the environment. From the most rudimentary hearing system of our aquatic ancestors to the complex human auditory system, perception of such events is instrumental; it guides the perceiver's behavior. Sounds can, then, be considered as sign vehicles or carriers of affordances: They inform the perceiver about potentials for interaction in the environment. Ecological psychology and biosemiotics suggest a tight link between perception and action, but this linkage has been largely ignored in traditional research on human audition. In contrast, ecologically informed studies of auditory perception suggest that listeners' perception of soundscapes is structured by semantic categories in relation to events and activities taking place in the heard environment. In a recent behavioral study (Nielbo et al. 2013) we investigated the affordance potentials of urban soundscapes. Participants listened to recordings of eight different outdoor urban soundscapes (public squares and parks), evaluated on a continuous scale how appropriate they were for four different activity types (e.g. 'studying for an exam' or 'riding your bicycle'), and justified their evaluations in free-format comments. The results revealed significant effects of soundscapes and activities, supporting the hypothesis that evaluation of a soundscape is influenced by the perceived potential for interaction of the environment, and the analysis of the comments gave an indication of the participants' motivation. Consequently, in this talk I wish to draw attention to the role of action in perception of soundscapes. References:

Nielbo, F., Steele, D., Guastavino, C. (2013): Investigating soundscape affordances through activity appropriateness. Proceedings of Meetings on Acoustics, volume 19, 040059.

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