

Advancing the User Experience of Hybrid Meetings with Binaural Audio

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Master thesis in Computer Science

In the context of office-work meetings, it has become a norm that one or more participants attend remotely while others are in the (physical) meeting room – the social situation that has been studied as “hybrid meetings”. We examine whether incorporating the direction of sound in the audio can support the remote attendees to recognize more clearly who is speaking in the meeting room and eventually improve the experience of attending a hybrid meeting. We present the results of a user study, in which 42 participants followed six different discussions recorded in a meeting room, in six conditions: three audio types are examined, once in a situation where the co-located conferees wore a face-mask and once without a mask. The results demonstrate that the binaural audio can support remote participation: especially in terms of general comprehension and confidence of comprehension, with higher effect for the face-mask conditions; also, it generates more similar attentional visual behaviours both with and without face-mask and reduce the number of transitions between the different regions of interest in the face mask conditions.

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