

David Robertson, University of Jena

Audiovisual Integration in the recognition of familiar voices

Audiovisual integration is an important process where auditory and visual signals combine to give an event more meaning. There are two particular cognitive constraints which allow audiovisual integration to occur, namely spatial disparity and temporal disparity. When the auditory and visual stimuli are in temporal and spatial proximity, integration is more likely to occur. This can be observed in the already well established literature on localisation (Driver & Spence, 1998) and speech recognition (McGurk & McDonald, 1976). In a recent study using English-language subjects and stimuli (Schweinberger, Robertson and Kaufmann, QJEP in press) we showed that audiovisual integration is also important in the context of speaker recognition. Results are presented here which replicate our previous study using German language subjects and stimuli. These results indicate that synchronisation of the voice with a moving face is important for audiovisual integration to occur. A second experiment reported here also suggests that synchronisation is an important factor and that it is not just facial speech movement that is important. The findings suggest that there is an important role played by synchronisation of the auditory and visual signals and that they require further investigation.