



EINLADUNG

zum Vortrag im Rahmen des Seminars des SFB/TRR 31

Freitag, 15. November 2013, 14 Uhr c.t.

im Raum H28 / R 2.31 des Med. Campus Magdeburg
und Raum W2 1-143 der Universität Oldenburg,
(per Videoübertragung)

“Temporal expectations in audiovisual stimuli”

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Temporal regularities can create expectations about future stimuli that can influence perception. Here I will present psychophysical data showing that temporal regularities affect discrimination performance about temporal asynchronies and can create a distortion in perceived timing.

To measure perceptual performance, participants reported the temporal order of an audiovisual pair or multiple identical audiovisual pairs of stimuli presented in a regular sequence. Sensitivity to asynchrony increases if two audiovisual pairs are presented as compared to only one. Surprisingly however, sensitivity with three and four repeated audiovisual stimuli does not increase any further.

To measure perceived distortions in timing of stimuli, participants were presented with an isochronous sequence of stimuli (either sounds or lights) and they reported the temporal order of the last stimulus in the sequence with respect to a probe stimulus in the other modality. Results suggest that the expectation of when the last stimulus is to occur changes the perceived timing of the stimulus, so that anisochronous stimuli are perceptually shifted towards the expected time.

I will discuss these two effects in relation to a Bayesian account of perception, where the expectation of when a stimulus is to occur (prior distribution) is combined with sensory evidence (likelihood function) to give rise to perception (posterior distribution).