

Nadine Kloth, University of Jena

Adaptation in face perception

Whereas the investigation of perceptual aftereffects has a very long tradition in low-level vision research, the report and analysis of face-related high-level aftereffects is only a relatively recent line of research. Webster et al. (2004) first showed a visual aftereffect on the perception of face gender when finding that adaptation to male faces biased the classification of androgynous faces towards female gender. Similar adaptation effects have also been observed for one of the most important visual social signals: Human eye gaze. Jenkins et al. (2006) found that adaptation to gaze into one direction virtually eliminated participants' ability to perceive smaller gaze deviations into the same direction.

In a series of four experiments we further analysed these aftereffects. In Experiment 1 and 2 we investigated the neural correlates of eye gaze adaptation and found that direction-specific ERP-modulations to test faces were found no earlier than ~250-350 ms. In Experiment 3 we determined the temporal characteristics of eye gaze adaptation effects and found the aftereffect to be surprisingly long lasting while its decay followed an exponential decay function. Finally, we analysed the neural correlates of gender adaptation effects (Experiment 4), applying methodological improvements developed in Experiments 1 and 2, and extended the existing knowledge about ERP-correlates of gender adaptation.