

# 3 Learning and attention affect segmentation of complex visual scenes in visual cortex

**Contents** In the previous chapter we have established that global-scene perception influences the perception of low-level features such as contrast and that it induces figure-ground modulation (FGM). The Gestalt laws that define the figure regions are learned through a life time of visual experiences. But how does learning at a shorter time scale influence FGM? And how does attention play a role in FGM? These questions are answered by training macaque monkeys on a shape discrimination task while recording neural signals from areas V1 and V4. By following the time course of responses through the different stages of this experiment, we can start to answer RQ2, RQ4, and RQ6.