

Per 3 Lecture 4 Exercises

Find and download the following article:

Eagleman, D. M. (2001). TIMELINE: Visual illusions and neurobiology. *Nature Reviews Neuroscience*, 2(12), 920-926. doi:10.1038/35104092

Now try to answer the following questions.

1. Explain the Mach bands illusion in terms of circular, antagonistic receptive fields.
2. Give an example of an illusion that demonstrates contrast enhancement through lateral interaction.
3. What evidence is there that the brain fills in illusory contours on the basis of feedback from higher brain centers.
4. What is a multistable stimulus? Give some examples.
5. What is the flash-lag illusion? How does it relate to the perceptual present?
6. Explain the different resolution limitations of fMRI and EEG.
7. In the process of recognizing a phoneme, are voice and lip-movement cues combined before or after unimodal acoustic and visual information are assigned to a phoneme? How do we know this?