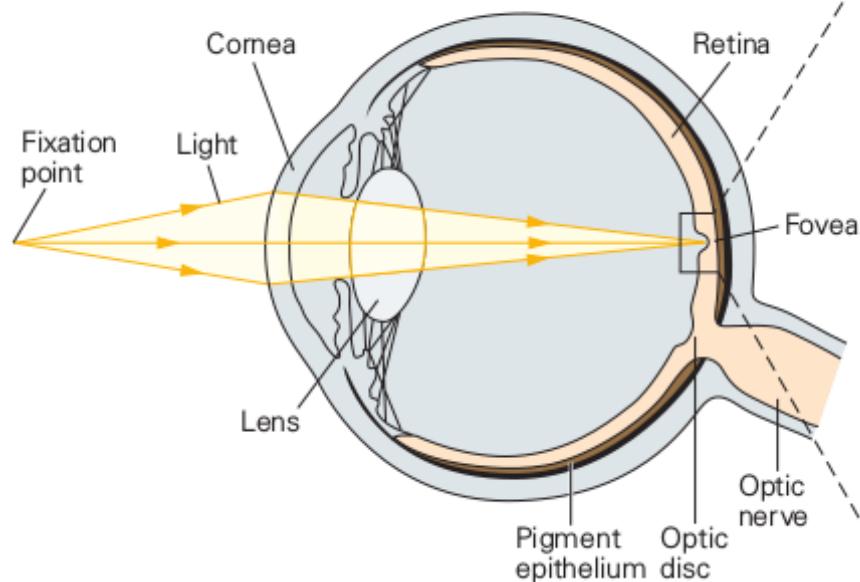


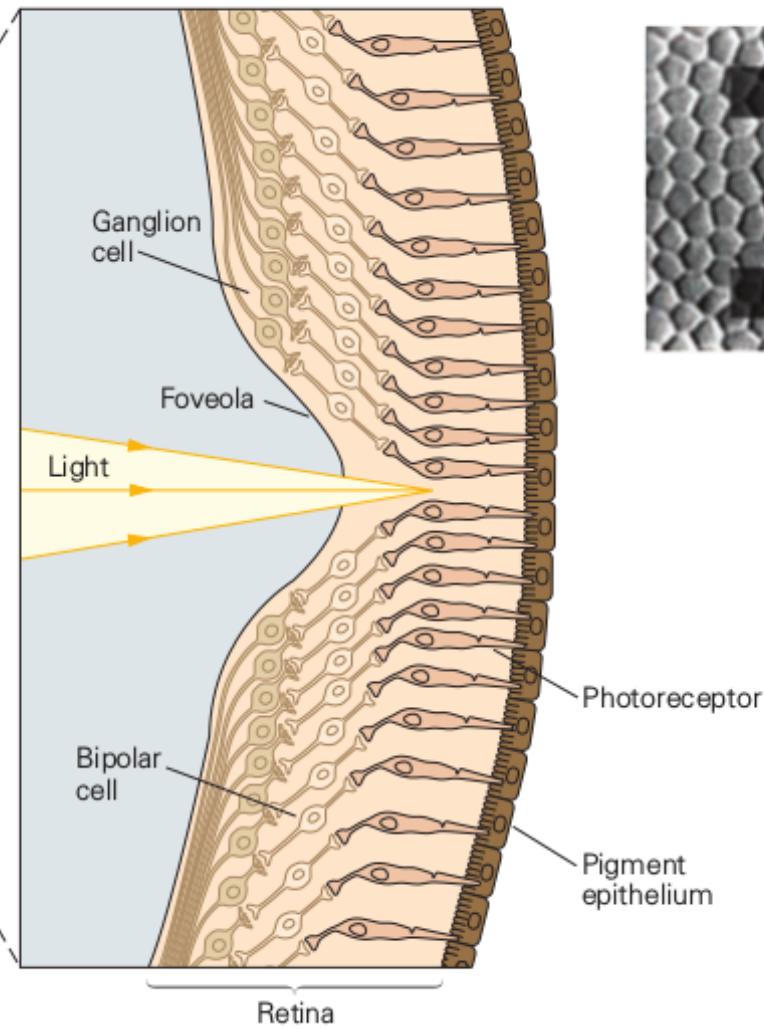
Low level Vision Processing

Visual Scenes onto the retina^[1]

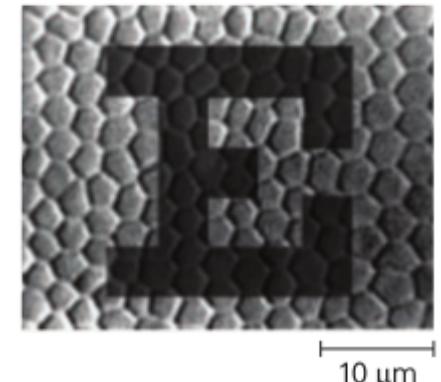
A Refraction of light onto the retina



B Focusing of light in the fovea

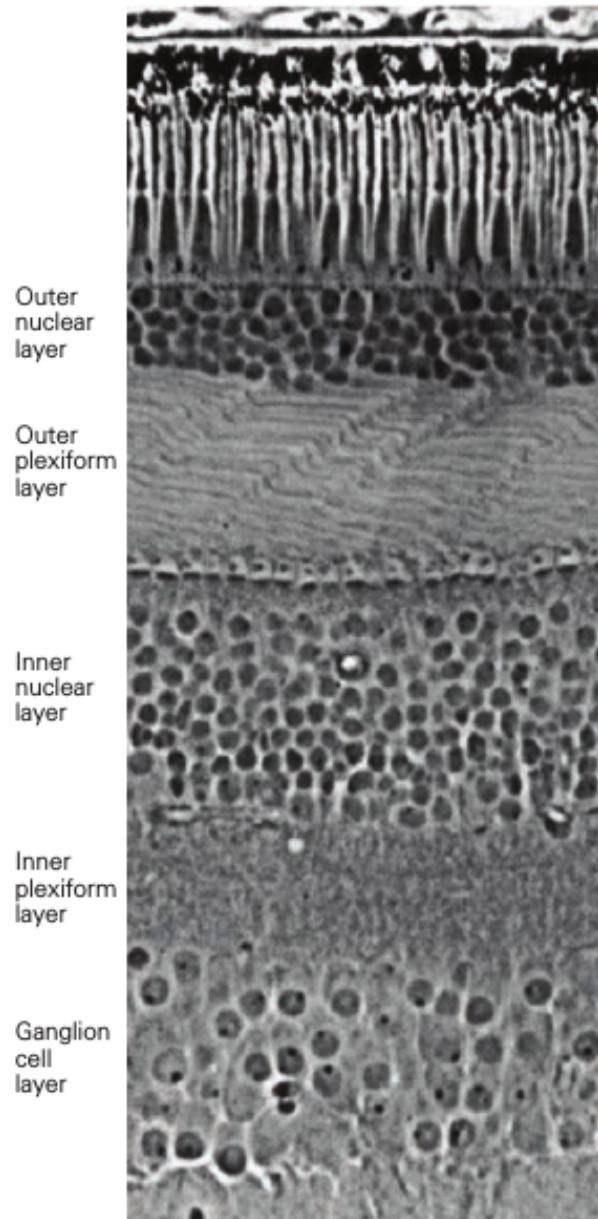


C Packing of photoreceptors in the fovea

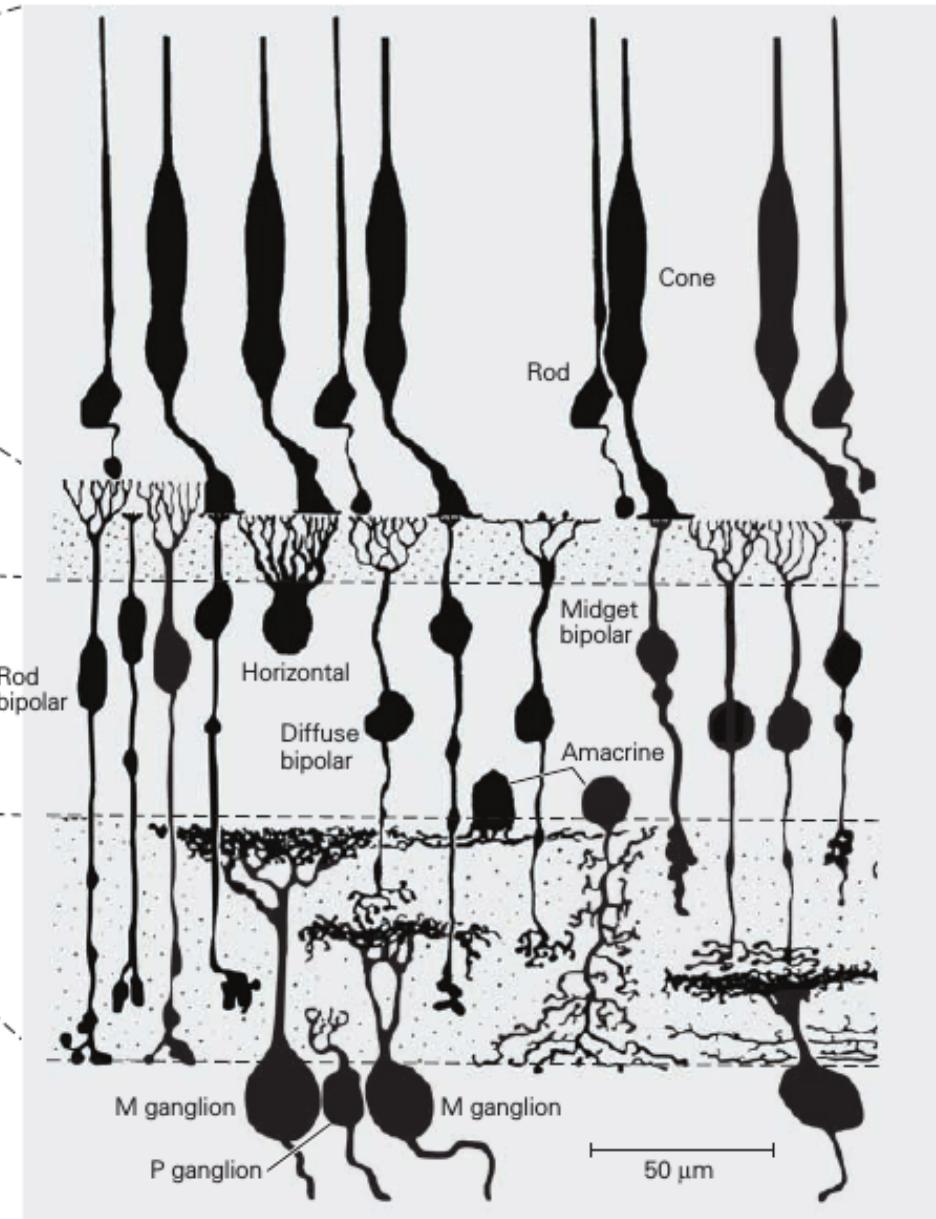


Layers in Retina^[1]

A Section of retina

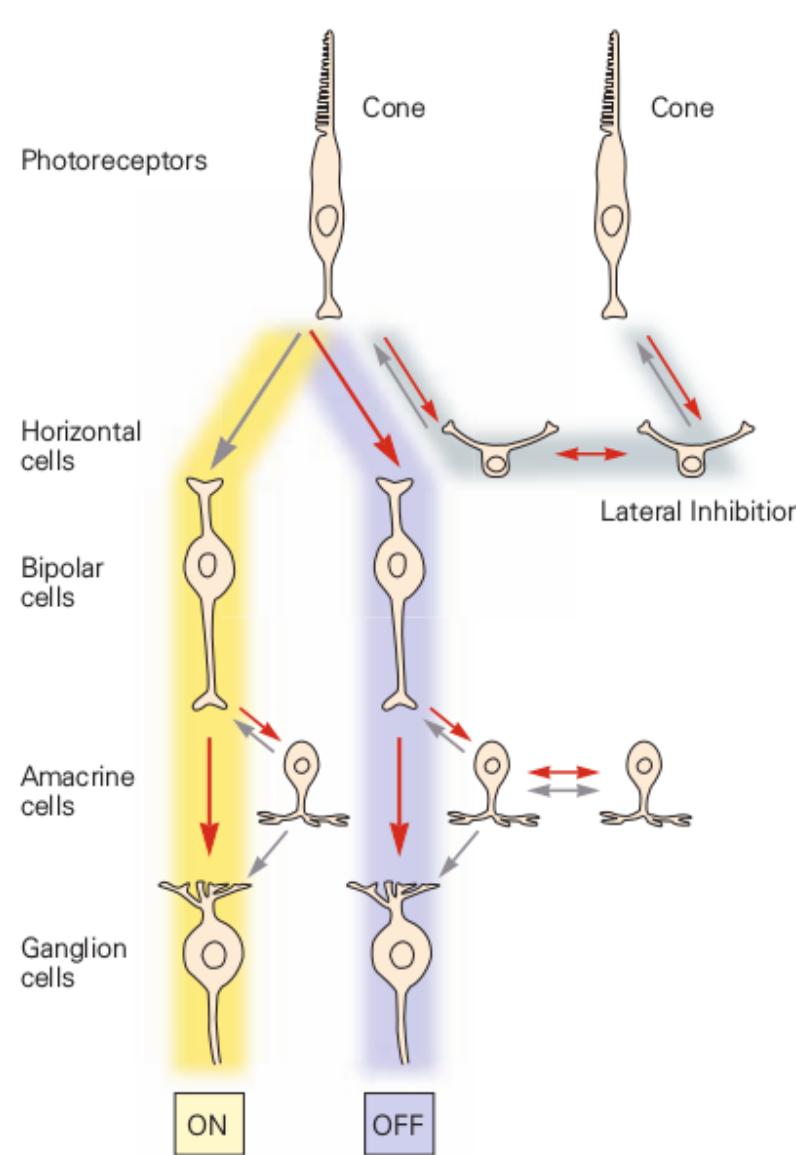


B Neurons in the retina

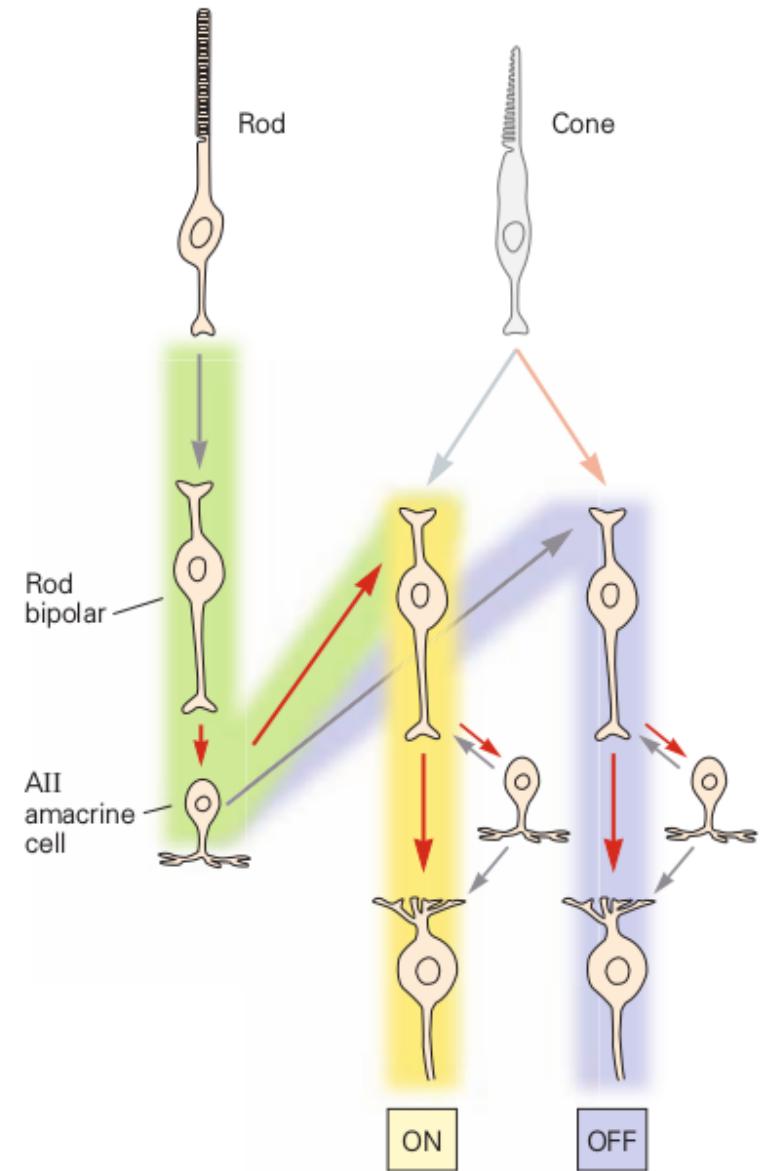


The Retinal Circuitry^[1]

A Cone signal circuitry



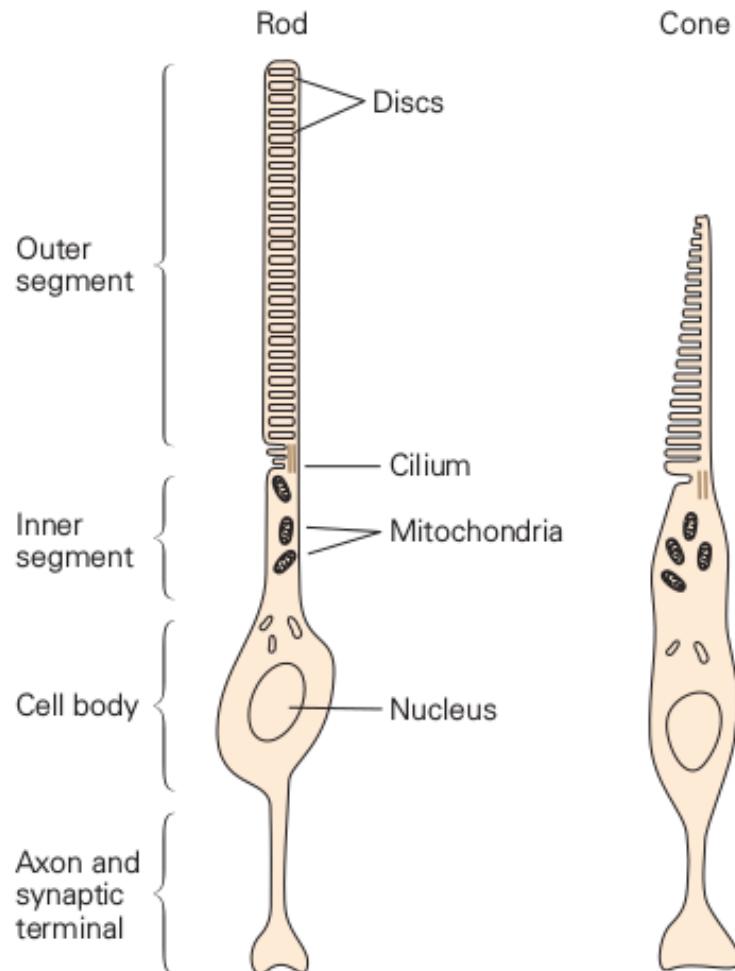
B Rod signal circuitry



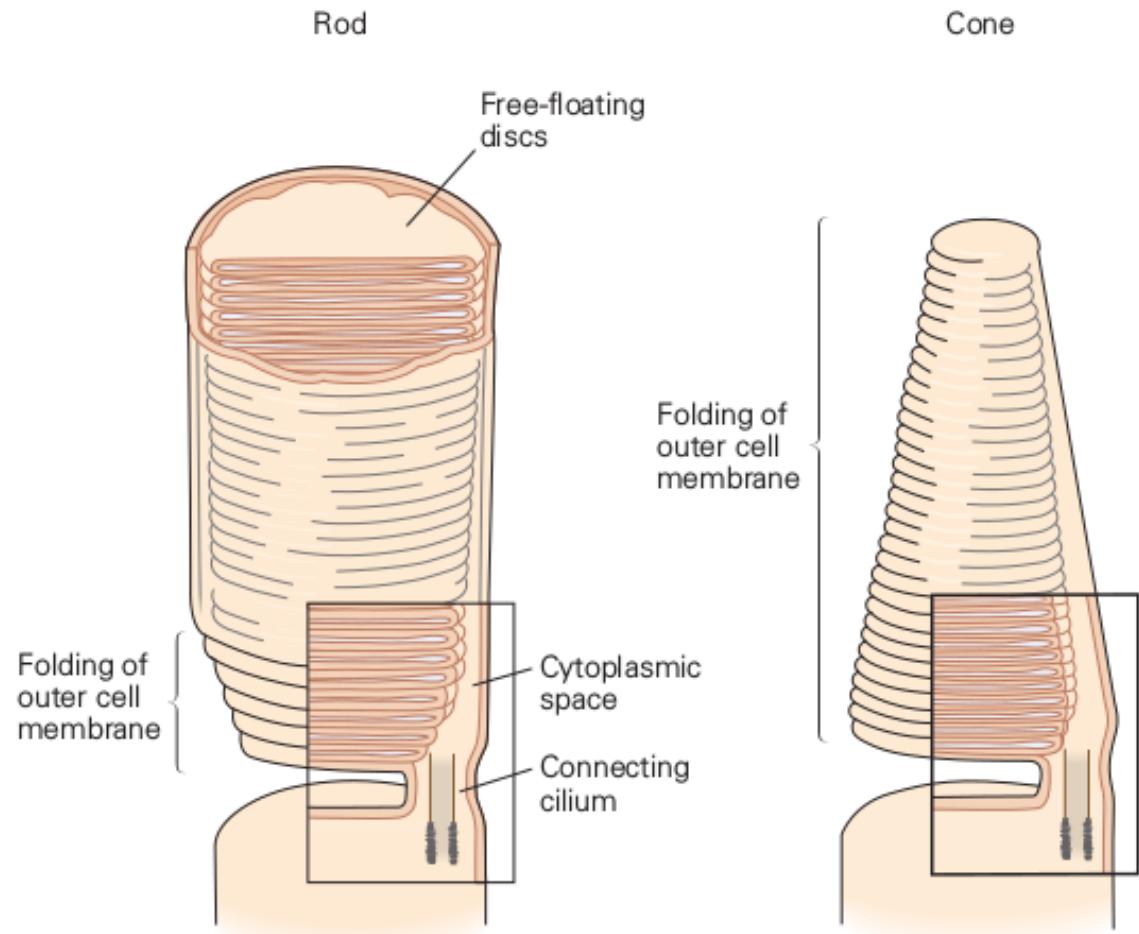
What is the difference between ON bipolar cell and OFF bipolar cell?

Rod and Cone Structures^[1]

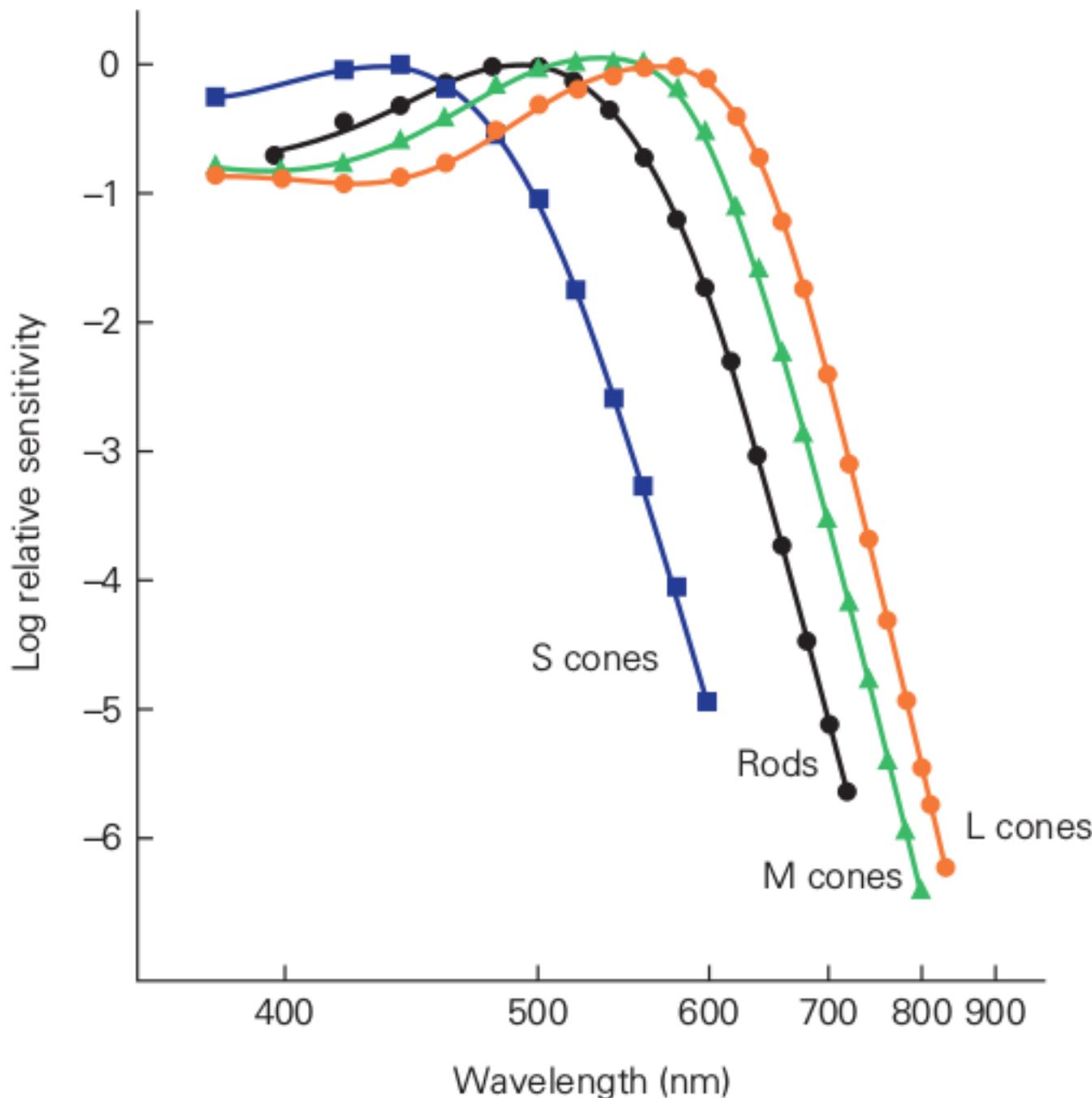
A Morphology of photoreceptors



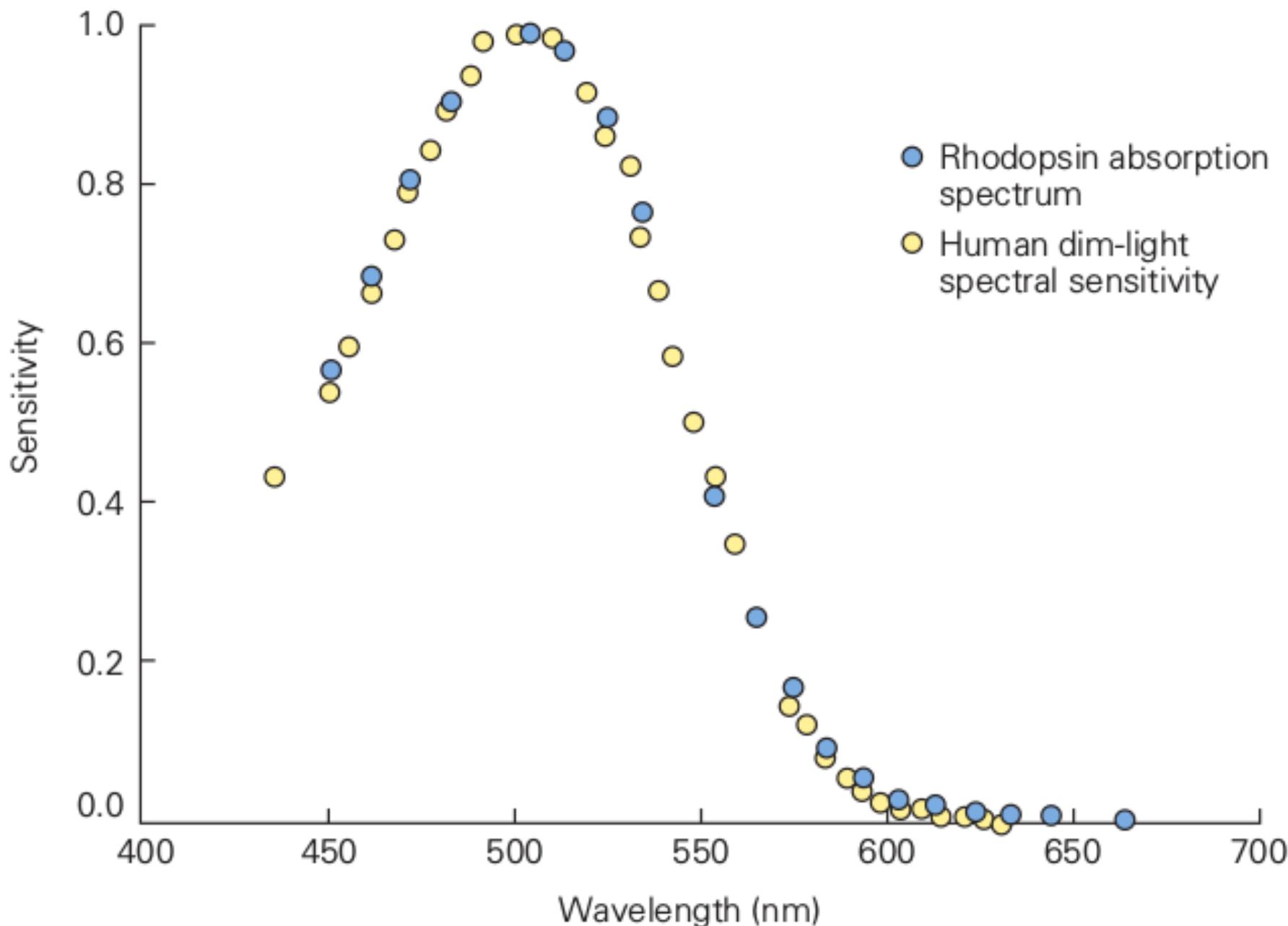
B Outer segment of photoreceptors



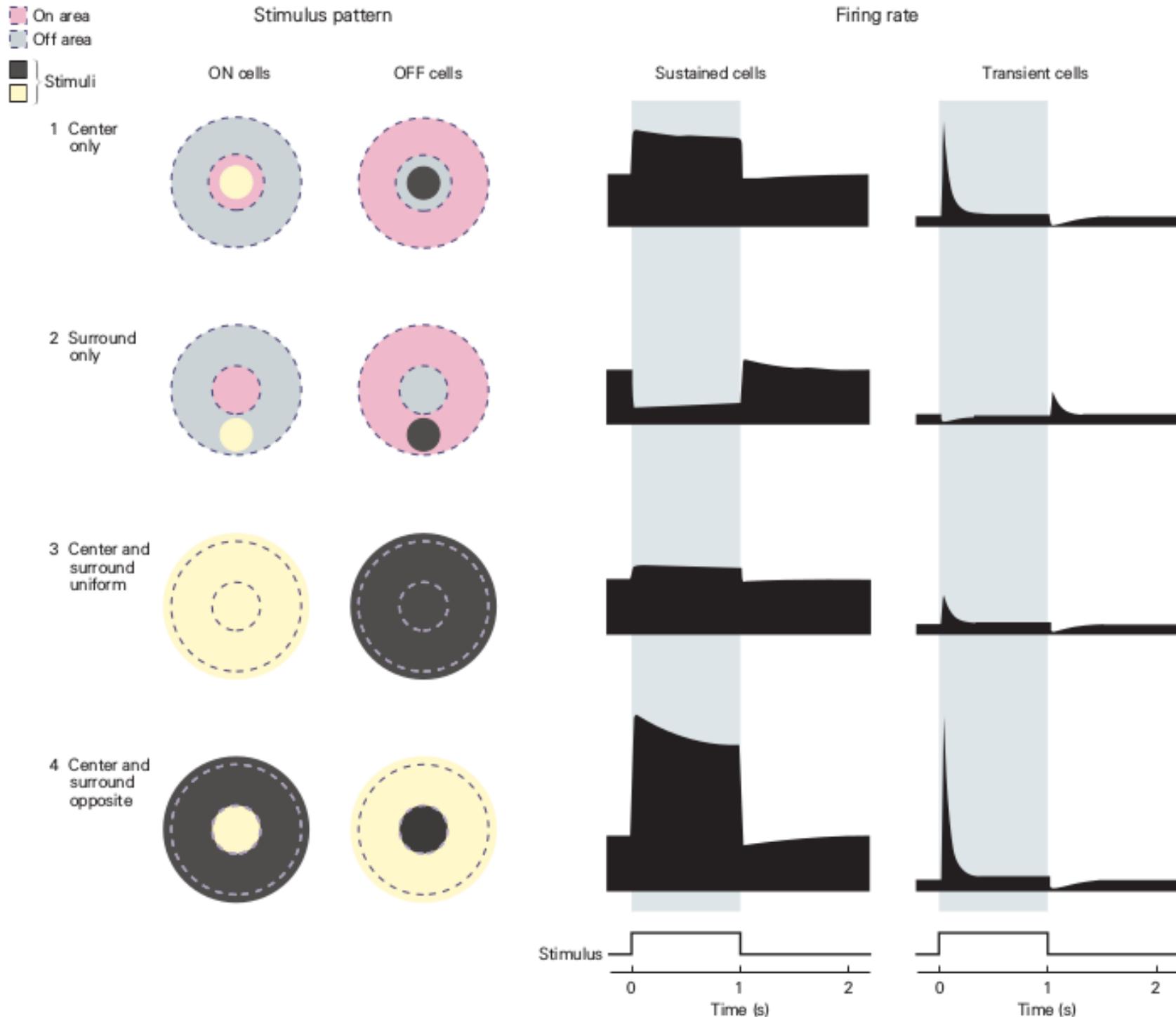
Sensitivity Spectra for cones and rods^[1]



Absorption spectrum of rhodopsin^[1]

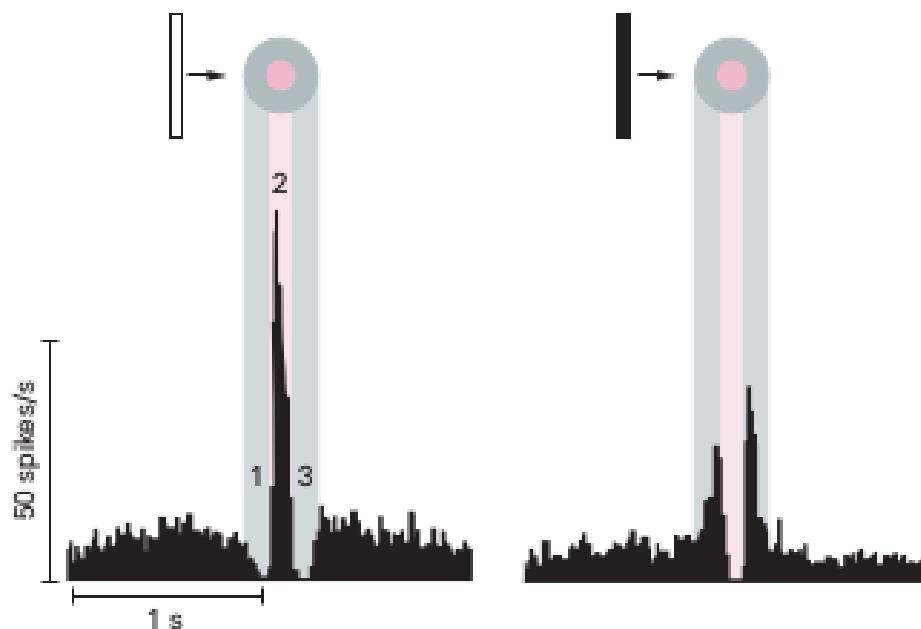


Center-Surround Receptive Field^[1]

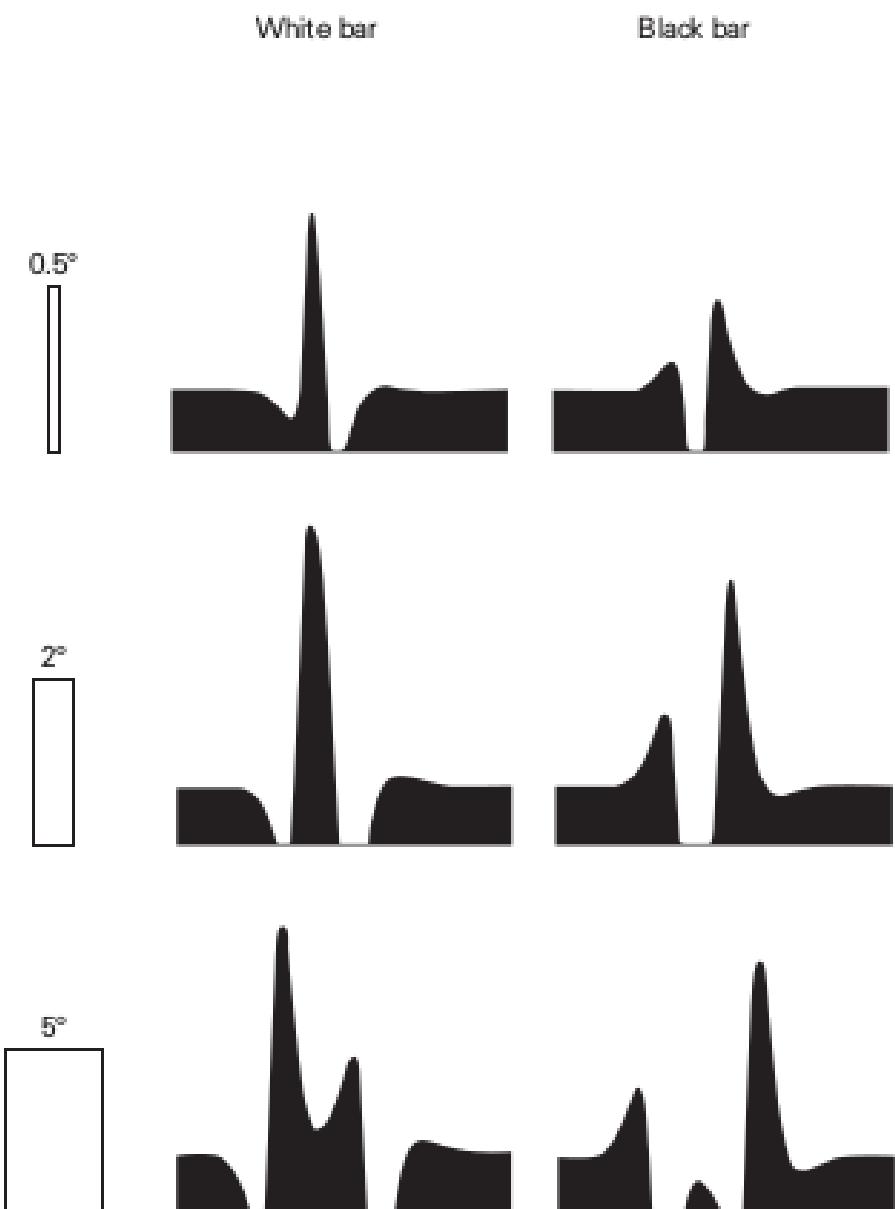


Response to moving objects by retinal ganglion cells^[1]

A ON cell response



B Model prediction

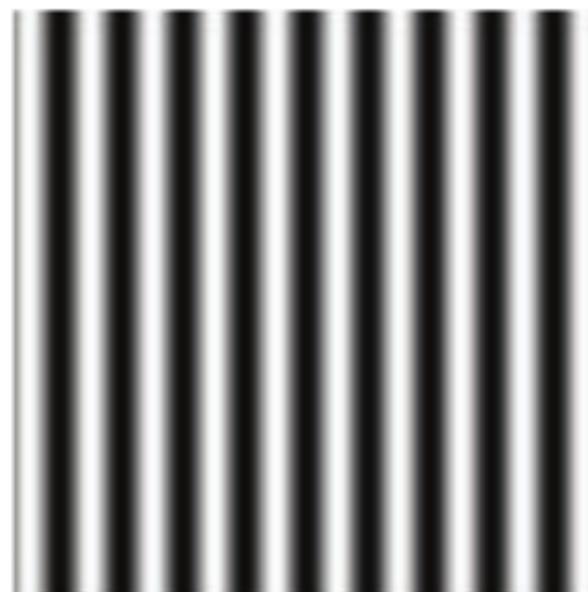


Spatial Frequency^[1]

Low spatial frequency



High spatial frequency,
high contrast



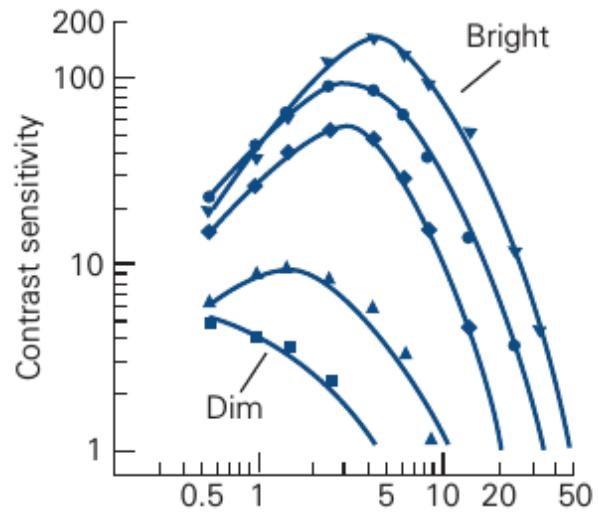
High spatial frequency,
low contrast



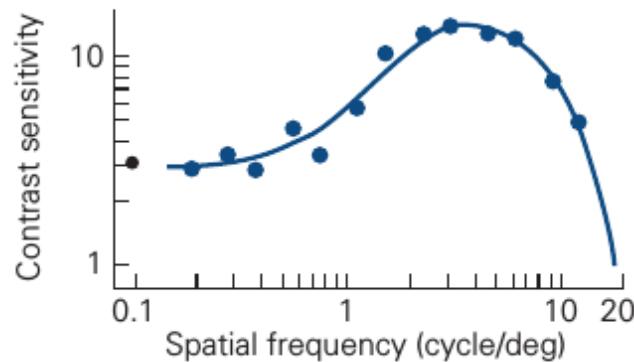
Spatial Contrast Sensitivity^[1]

A Sensitivity of humans and monkeys

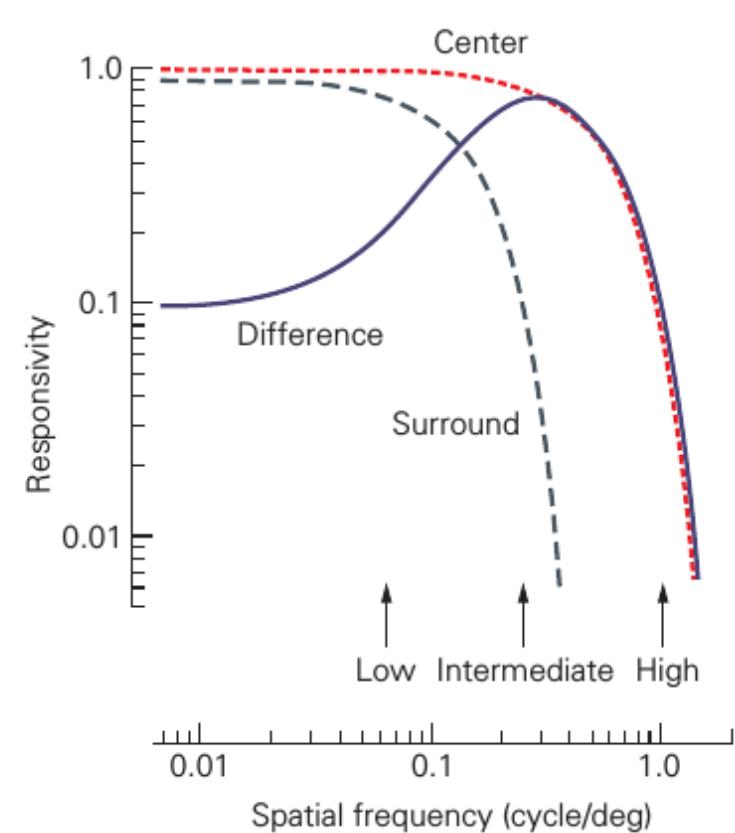
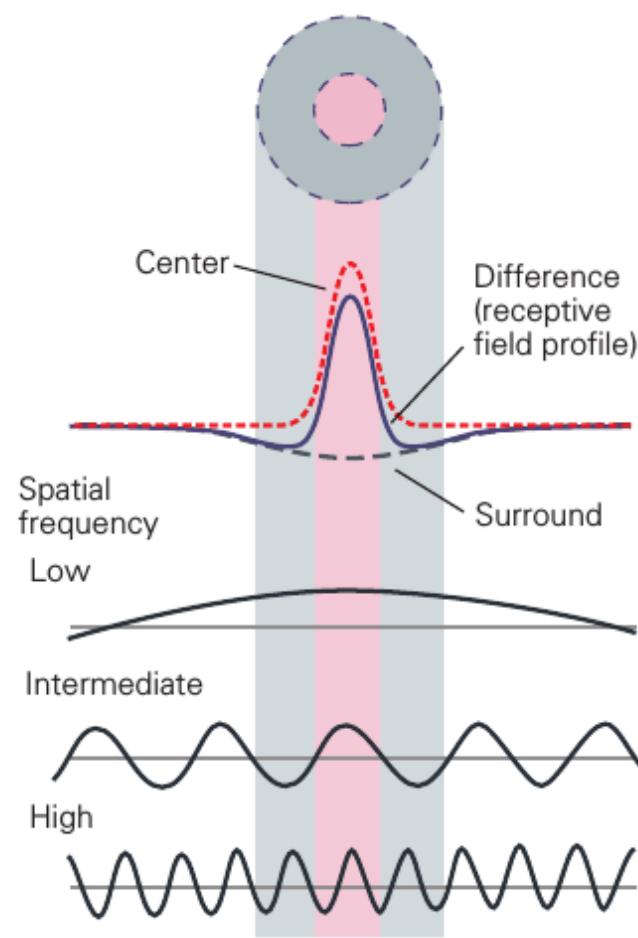
1 Human subject



2 Macaque ganglion cell



B Sensitivity of ganglion cell receptive field



References

1. Siegelbaum, Steven A., and A. J. Hudspeth. Principles of neural science. Eds. Eric R. Kandel, James H. Schwartz, and Thomas M. Jessell. Vol. 4. New York: McGraw-hill, 2000.