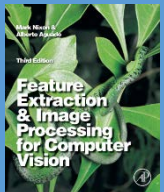


Lecture 1 Eye and Human Vision

COMP3204 & COMP6223 Computer Vision

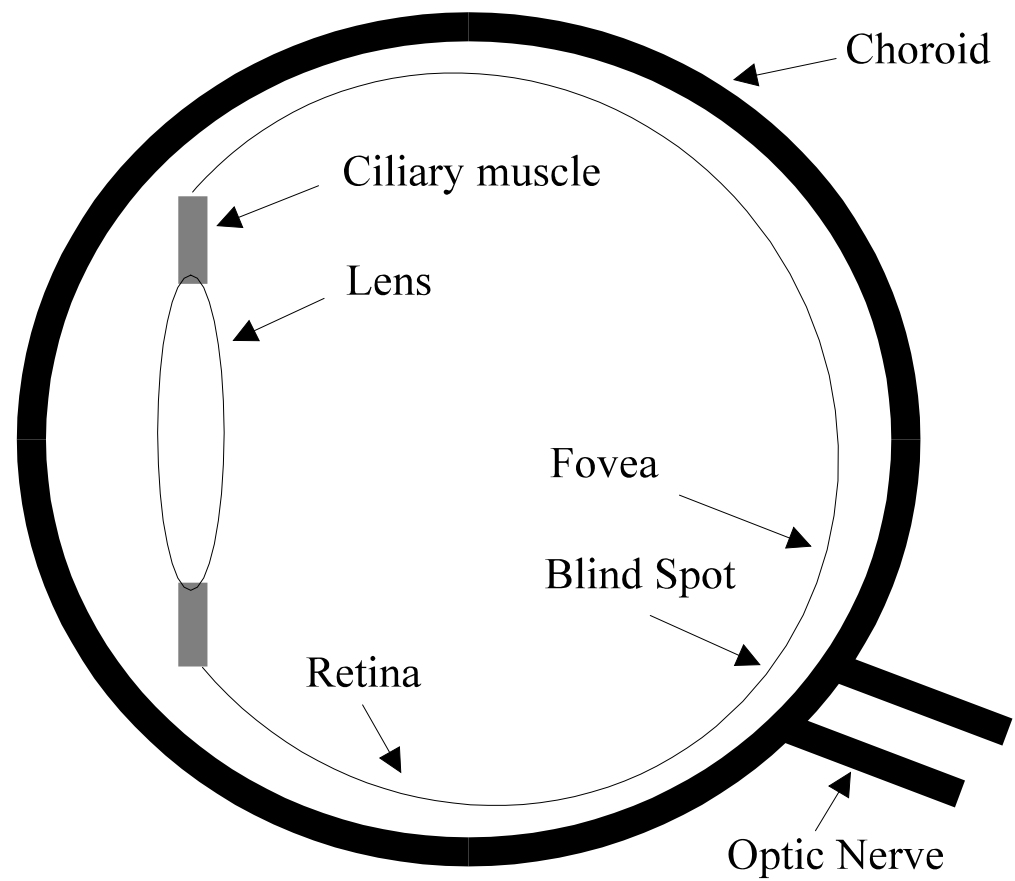
Is human vision a good model for computer vision?

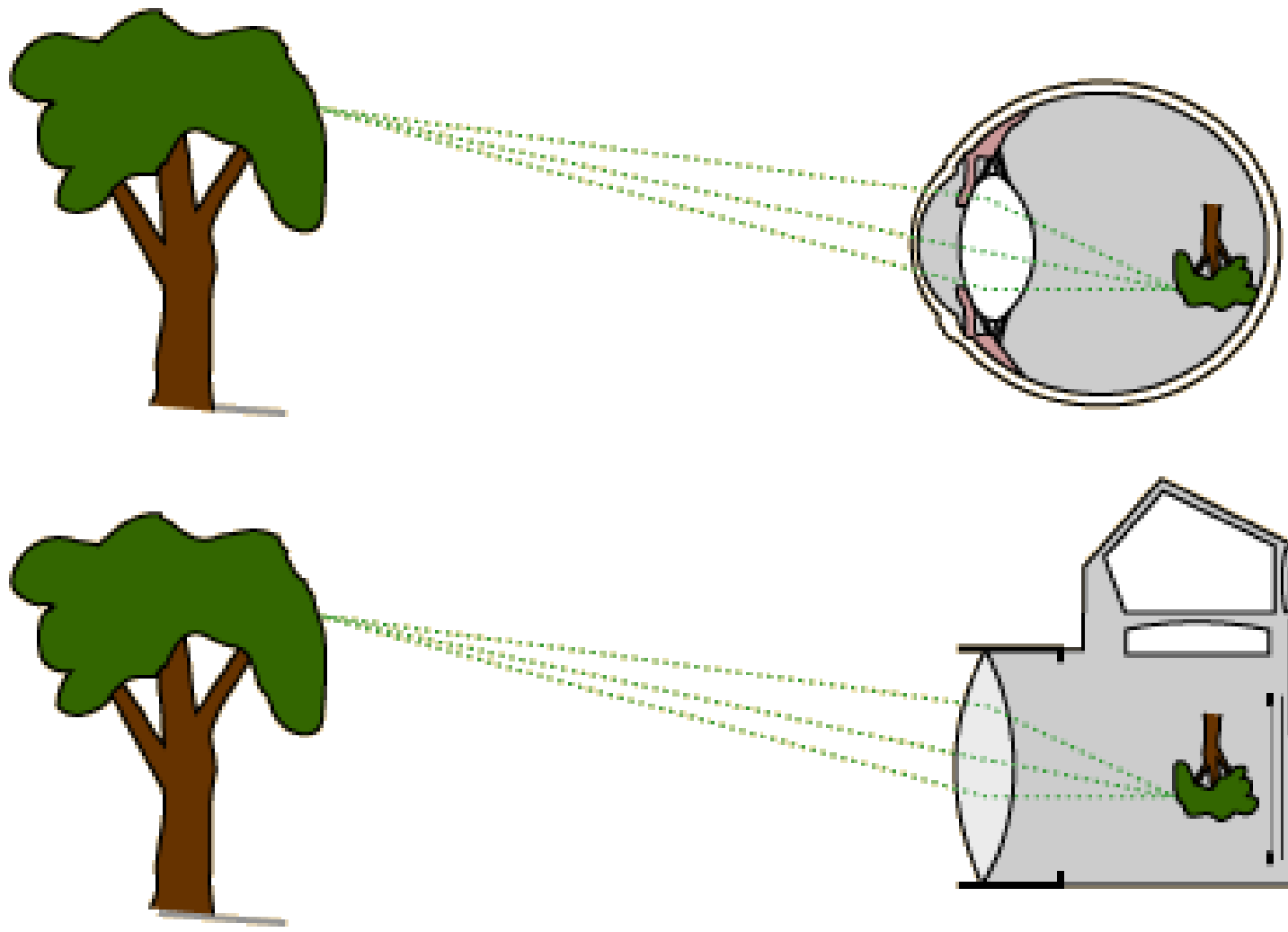


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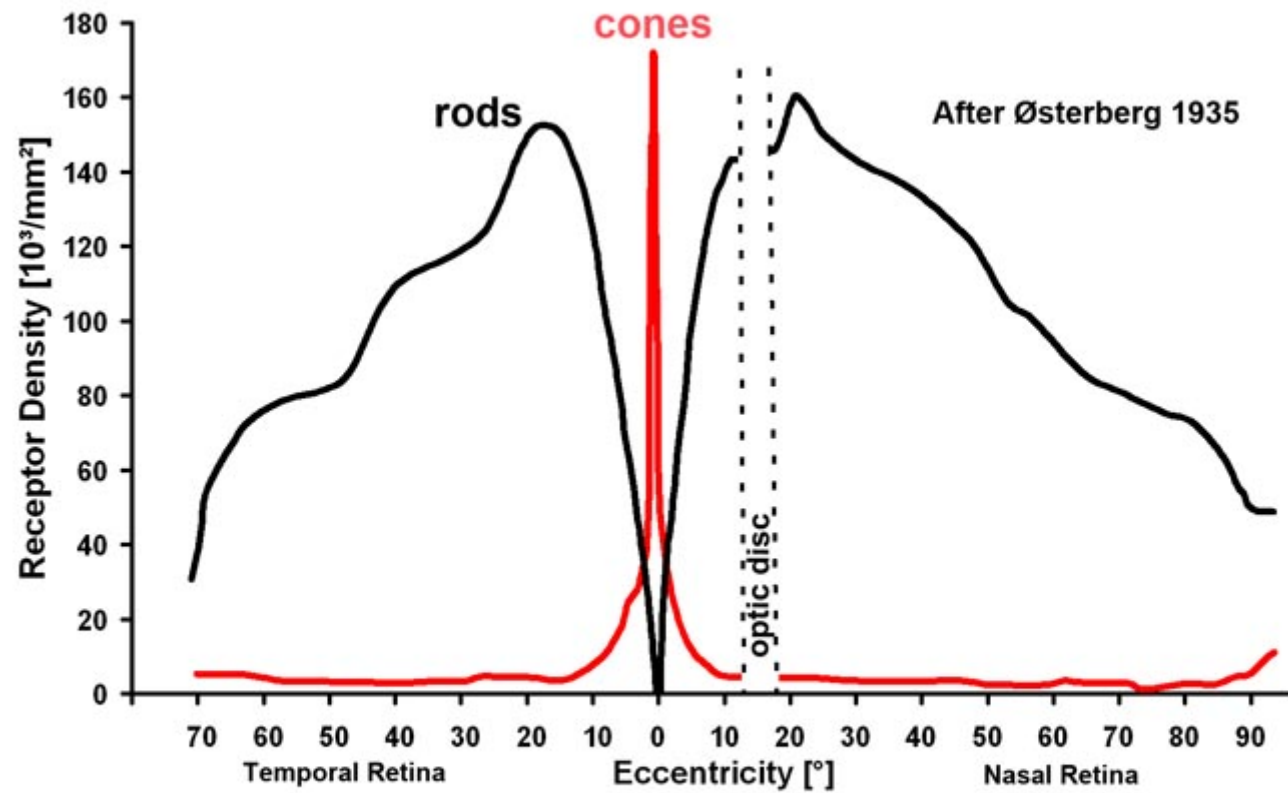
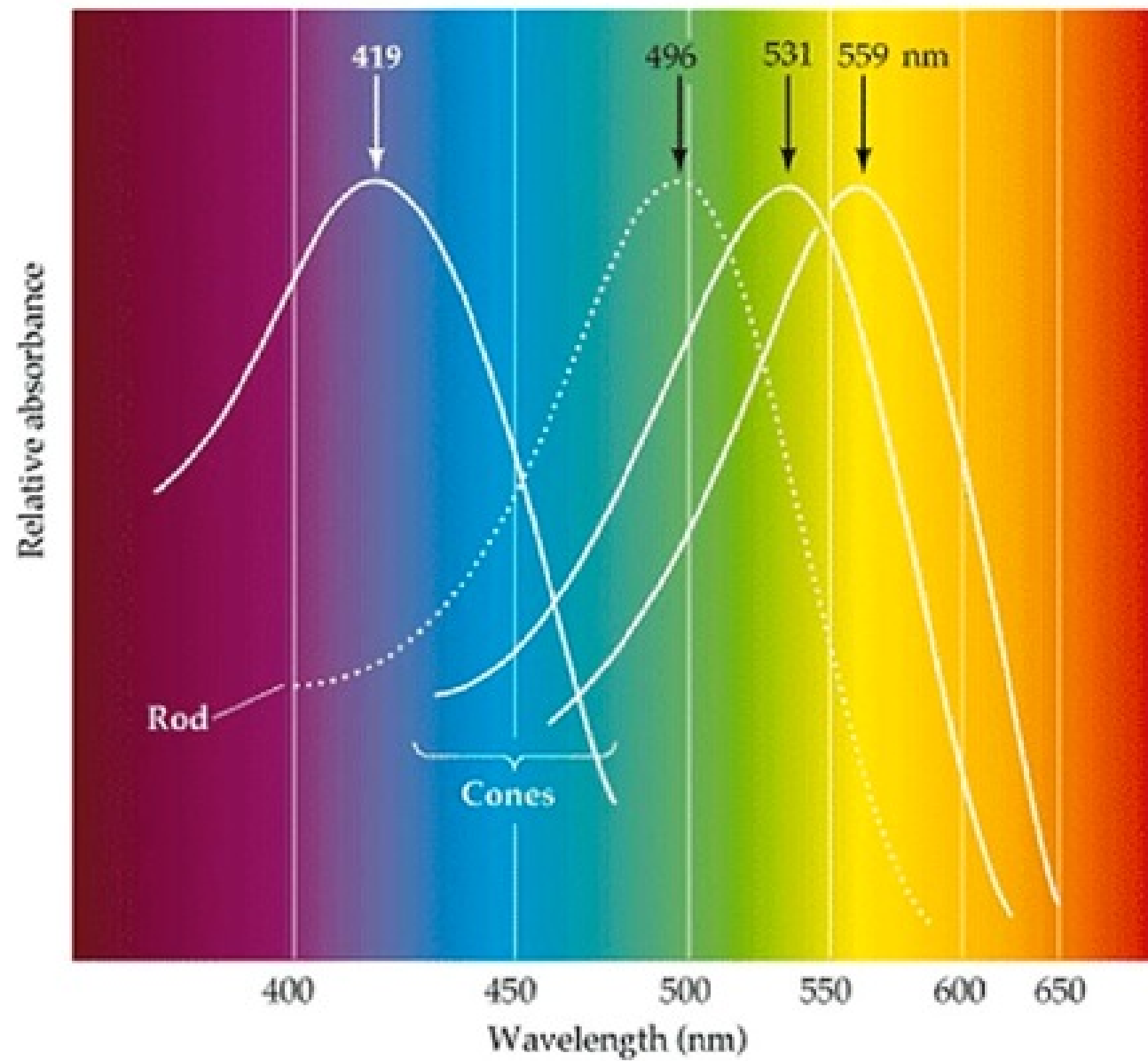


Fig. 20. Graph to show rod and cone densities along the horizontal meridian.



<http://webvision.med.utah.edu/wp-content/uploads/2011/03/Spectrum.jpeg>

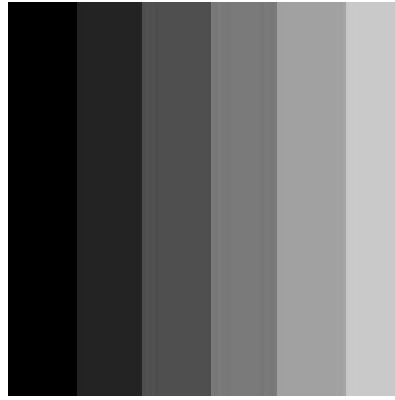
Spectral response



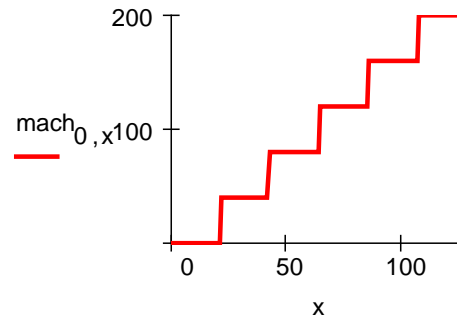
Blue

Red

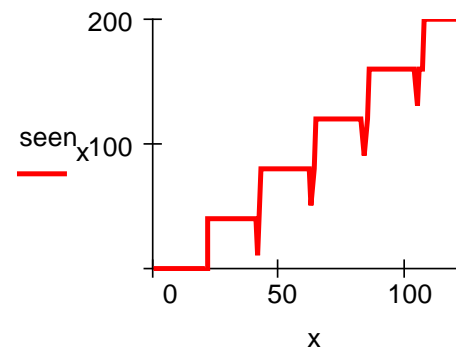
Spectral Response of Sensors



(a) image showing the Mach band effect



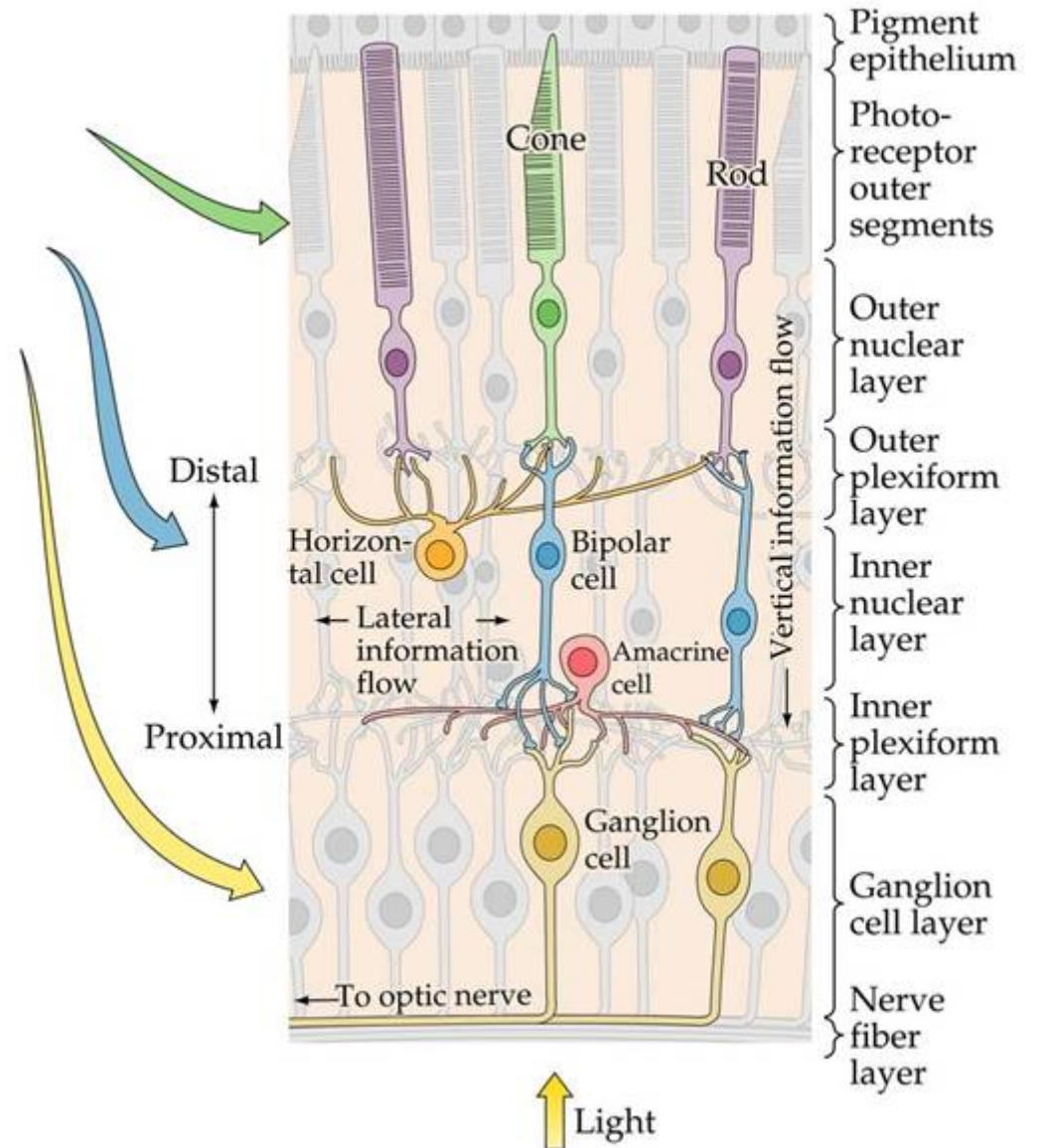
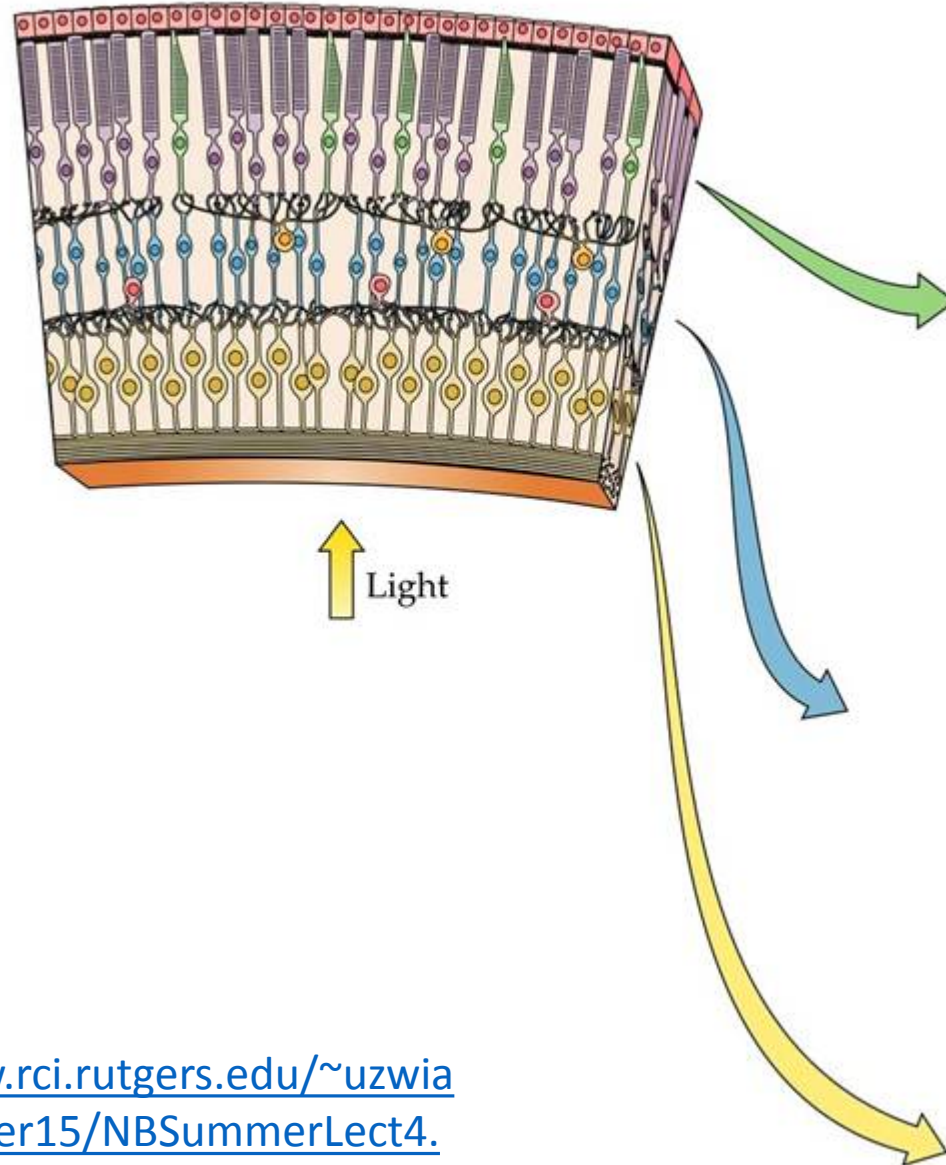
(b) cross-section through (a)

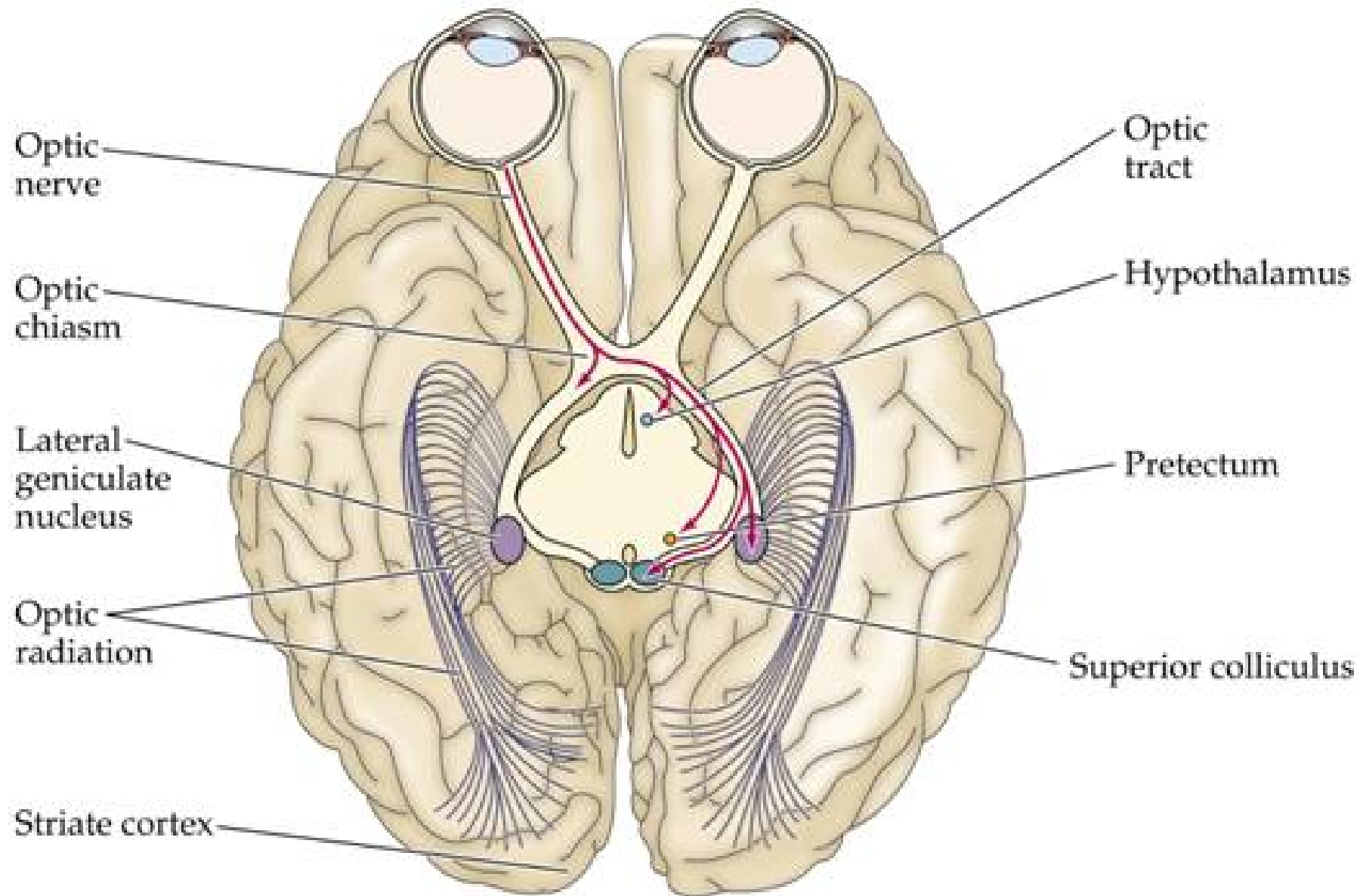


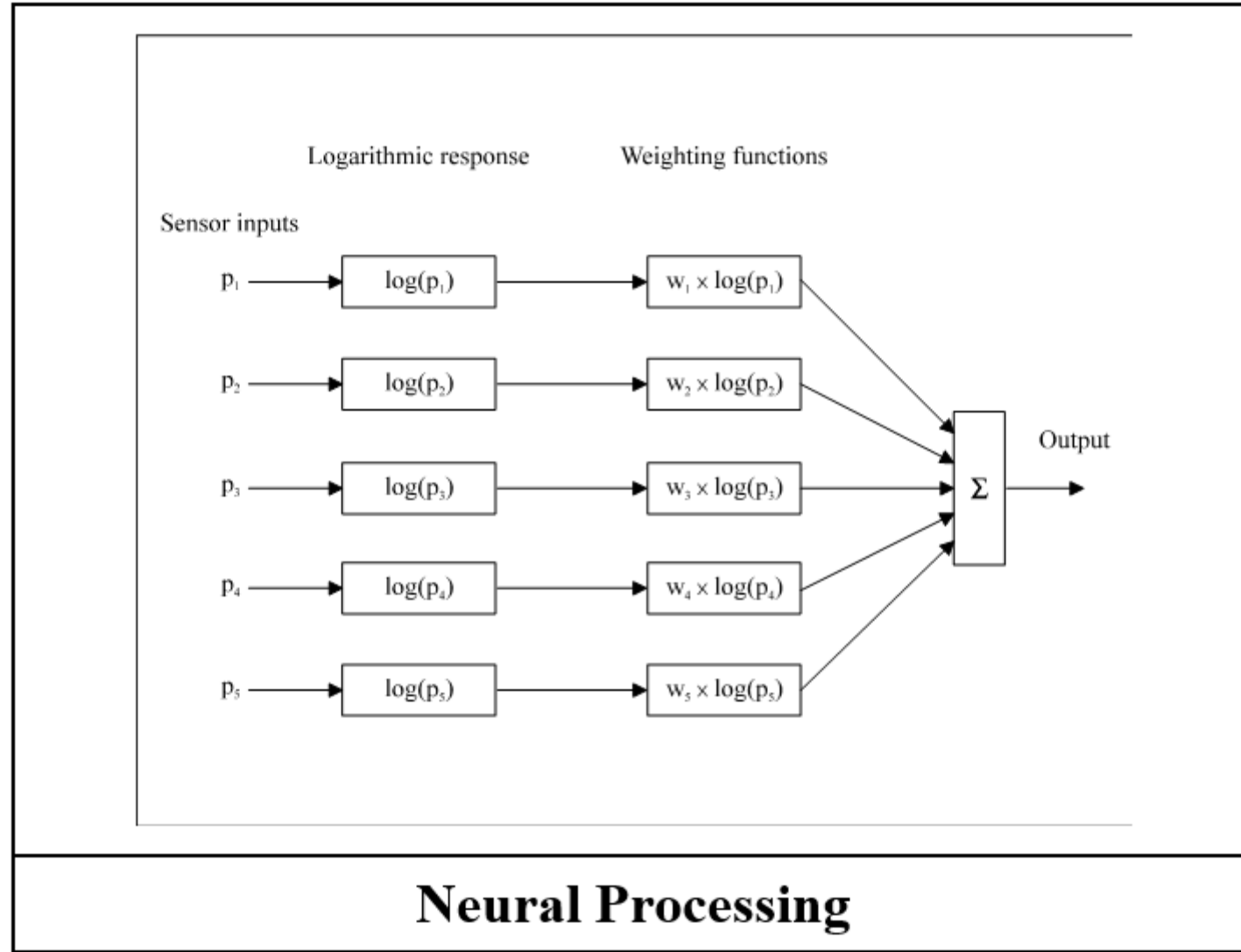
(c) perceived cross-section through (a)

Illustrating the Mach Band Effect

Section of retina

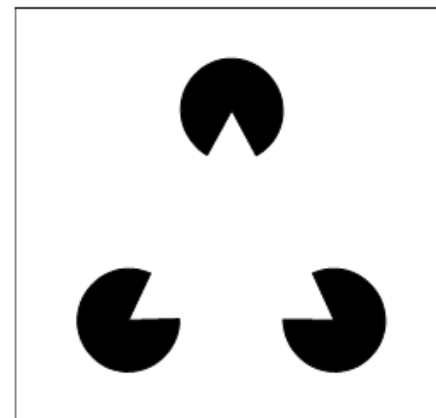






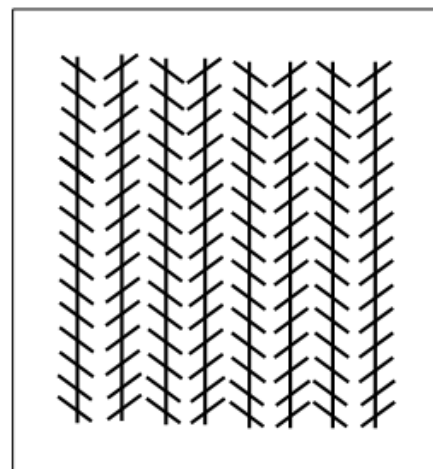


(a) word?

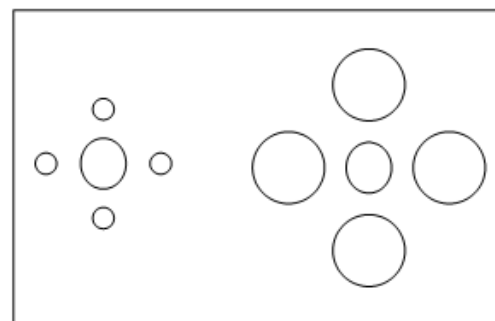


(b) Pacmen?

How Human Vision Uses Edges

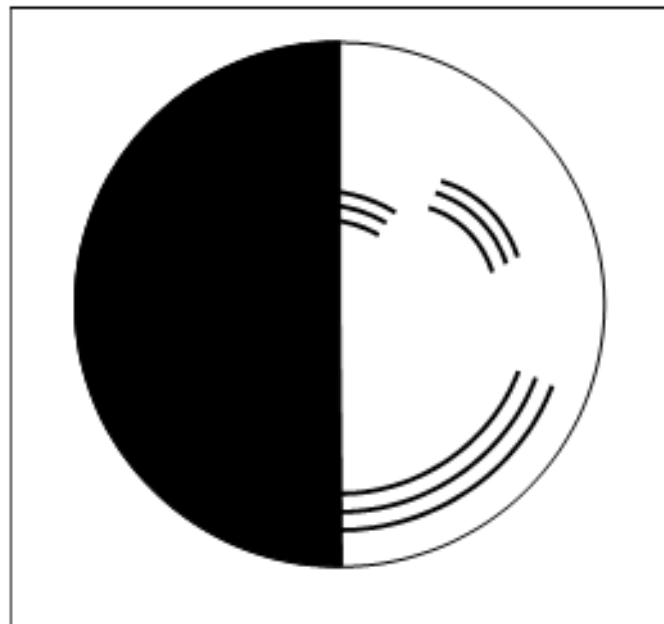


(a) Zollner



(b) Ebbinghaus

Static Illusions



Benham's disk