

Depth Cues



Depth Cues

Monocular

- Information for a single eye

Binocular

- Information from both eyes. E.g., the differences between the images between eyes.
 - Try doing it with your finger



Monocular cues

Linear Perspective

- Lines that converge in the distance



- Learnt from living in environments with these types of things – the effect is apparently much weaker in people not used to straight lines.



Atmospheric perspective

- The air scatters light making things further away seem fuzzier.



Texture gradient

- Details further in the distance are less clear



Interposition/Occlusion

- If one thing blocks another, the blocked one is in the background



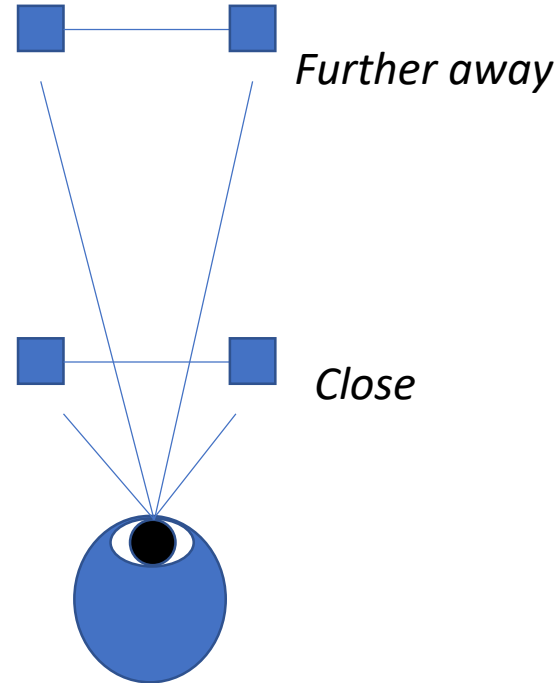
Shading

- Things cast shadows on each other in 3D



Motion Parallax

- Movement over the retina of an object's image due to movement of your head. Movement differs for objects depending on how far they are away from you (try putting your finger at different distances and moving your head back and forth).



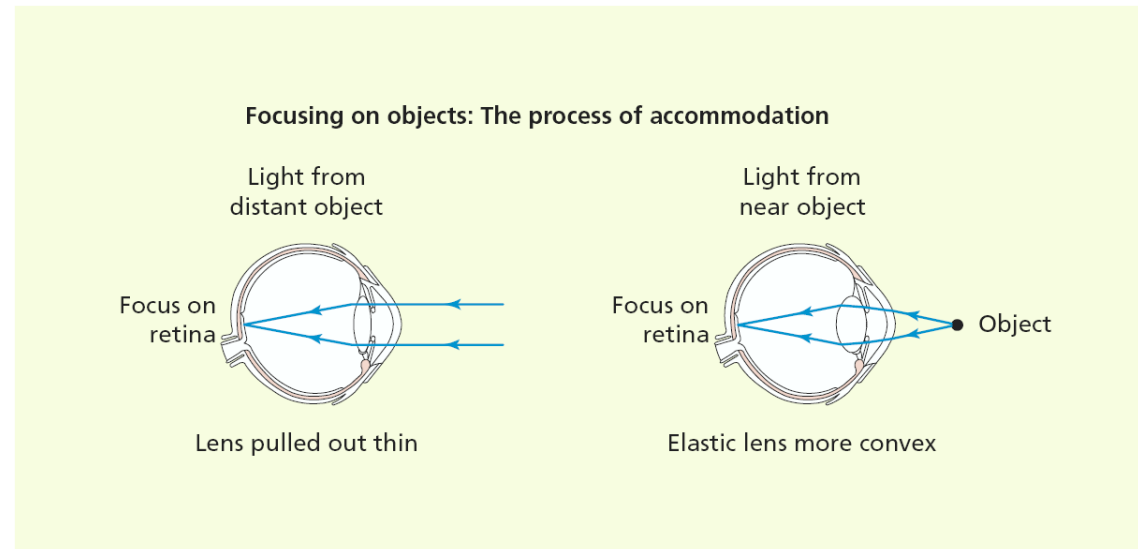
Oculomotor cues

Convergence

- Your eyes turn inwards on things that are close

Accommodation

- The lens of your eye thickens on things that are close



Binocular cues

Stereopsis

- Based on retinal disparity
 - This is the difference in the image each eye gets
 - Example: Look at your finger close up with one eye and then the other. Now look at it further away

