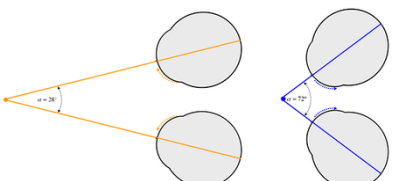# C₃ u₁ e₁ s₁ t₁ o₁ D₂ e₁ p₃ t₁ h₄

estimate • interpret • register • two • three x 2

Depth perception means...that one has the ability to accurately **estimate** the distance of objects and so perceive the external world in **three** dimensions. Our retinas **register** only **two**-dimensional images, yet our brain is able to **interpret** the information received from the retina into **three**-dimensional perceptions of the world. But how do we do it?

Type of Cue	Monocular	Binocular
Pictorial (in the environment)	**linear perspective** **interposition (or overlap)** **texture gradient** **relative size** **height in the visual field**	**X**
Non-Pictorial (biological cues)	**accommodation**	**convergence** **retinal disparity**

Depth Perception Cues - Examples

Stimulus Nbr	Cues depicted in stimulus or employed in perceiving it	Monocular or binocular?	Pictorial or Non-Pictorial?
1 2 x teacher. Oh dear.	Involves "fusing" the two images into one – employs retinal disparity. The fused (middle) image appears three-dimensional. Enough to put students off their holiday.	binocular	non-pictorial
2 Monet's poppies	Poppies – texture gradient Human figures – relative size, height in the visual field Clouds also contribute to relative size effect Interposition, e.g. child in foreground is partially obscured by grass and flowers	monocular	pictorial
3 Books in a uni library	Linear perspective (lines of bookcases) Texture gradient and relative size (books themselves, appearance of each bookcase diminishing in size with distance)	monocular	pictorial
4	Illustrates convergence, which is greater when the object of focus is closer to the perceiver.	binocular	non-pictorial