



Knowledge Map: Perception

This topic looks at how we perceive the world around us and how that perception is affected by motivation, emotion, expectation, and expectation.

Memory	Perception	Development	Research methods	Social influence	Language thought and communication	Brain and neuropsychology	Psychological problems
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Gibson's direct theory	Gregory's constructivist theory	Gilchrist & Nesberg's study of motivation	Bruner & Minturn's study of expectation
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Theories of perception *Nature vs. Nurture*

Gibson's direct theory (Nature)	
Sensation and perception are the same	
Optic flow patterns 	When moving towards objects they remain stationary while everything else rushes past.
Motion parallax 	When moving objects in the distance appear to move slowly while objects that are closer appear to move more quickly.
Affordances	We instinctively know what an object is for. An object's use is afforded by its properties.

Gregory's constructivist theory (Nurture)	
Sensation and perception are not the same	
Construction	The brain uses incoming information (sensation) with previous knowledge/experience to guess what is happening.
Inference	The brain fills in gaps (or infers) to create a conclusion about what it has seen.
Visual cues	While Gibson's theory cannot explain visual illusion Gregory's theory explains that illusions occur when the brain makes an incorrect conclusion.
Experience	Perception is learned from experience. The more we interact the more sophisticated our perception.

Visual cues and constancies *Information used to navigate the world*


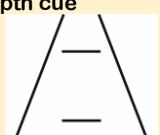
Binocular depth cues	
Retinal disparity	Difference between the view of the left and right eye is more pronounced as an object becomes closer.
Convergence	Following an object as it comes closer causes our eyes to point closer together. This causes strain on muscles.
Constancies	Objects are the same even if we view it from different angles.


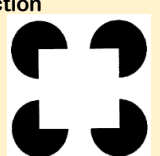
Monocular depth cues	
Height in plane	Objects that are further away appear higher up
Relative size	Objects that are further away appear smaller
Occlusion	Objects that are closer obscure objects that are further away
Linear perspective	Parallel lines such as roads, paths or rivers converge as they get further away.

Factors affecting perception *Perceptual set – the tendency for the brain to notice some things more, less or not at all.*

Culture Social world we live in affects what our senses pick up.	Emotion The tendency for our brain to notice exciting things and block threatening or embarrassing things.	Motivation Wanting something increases our awareness to it.	Expectation Beliefs based on past experiences can affect how we perceive things.
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Visual illusions *Why visual illusions occur*

Explaining visual illusions	
Size consistency 	Objects perceived as constant size despite size on the retina changing with distance.
Misinterpreted depth cue 	Objects apparently in the distance scaled up by the brain to look normal size.

Explaining visual illusions	
Ambiguous figure 	Two possible interpretations of the image.
Fiction 	Illusory contours cause us to see something that isn't there