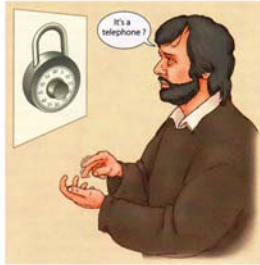
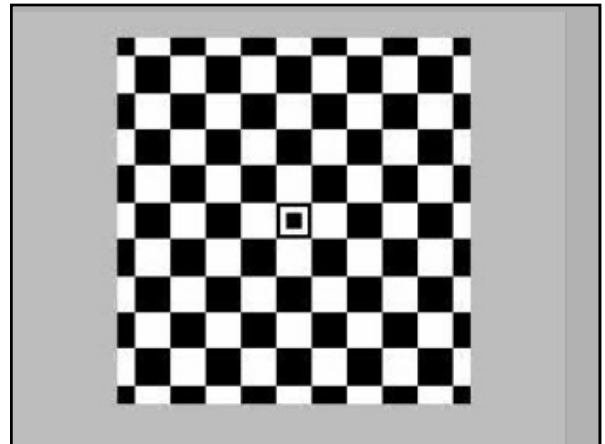
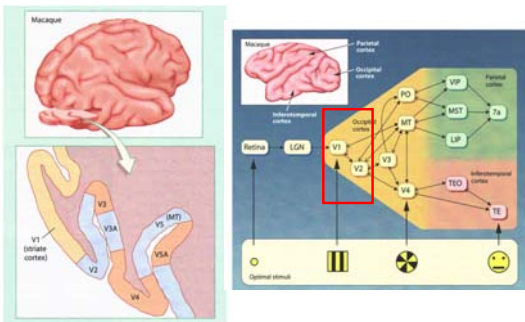
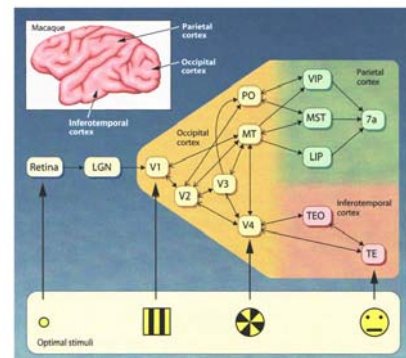
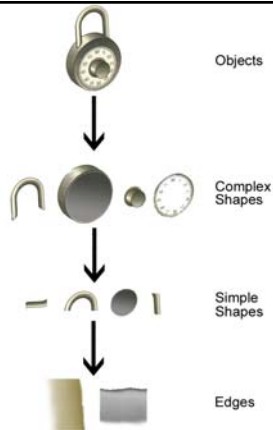


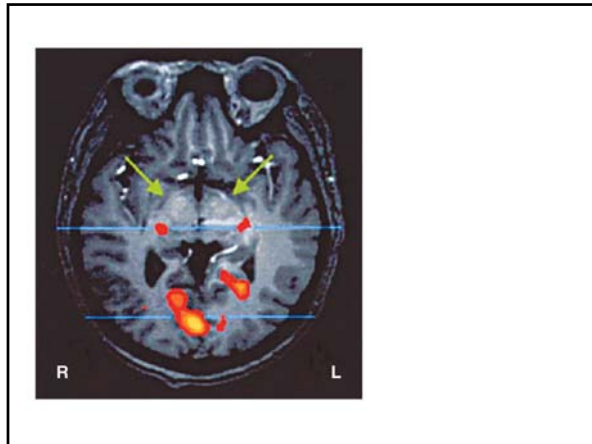
Visual Perception

Visual Perception



Visual Agnosia #1 1.3





Blindsight

- Explicitly claim they are blind, but implicitly respond accurately
- Ability to unconsciously respond to stimuli in their scotoma

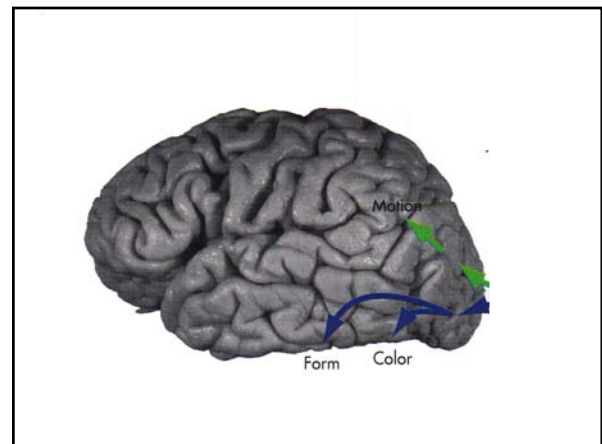
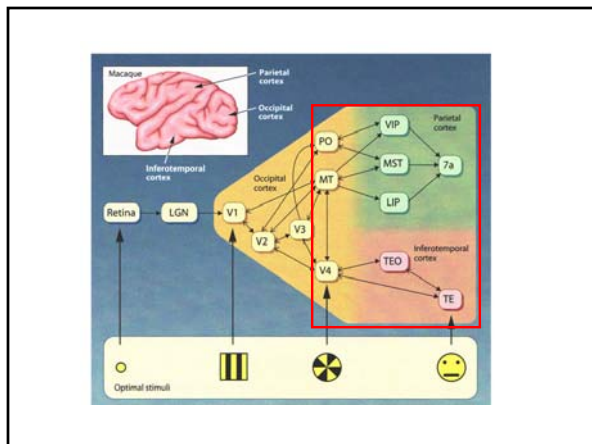
Patient D.B

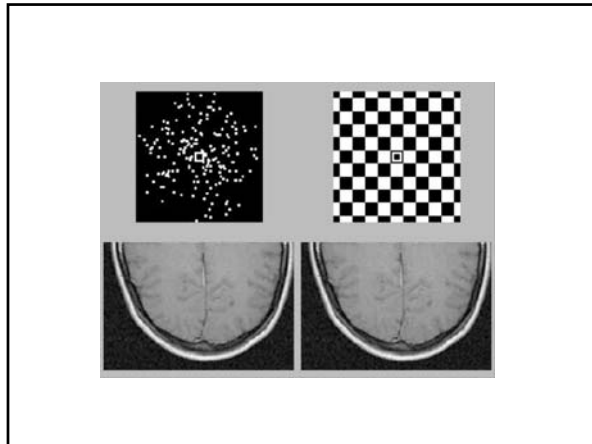
- A forced-choice (discrimination) task
- Shows performance higher than 75% success rate (chance is 50%)
- Claims to see nothing (cannot tell the difference)

Discrimination task	Percentage correct
X versus O	~85%
□ versus ◇	~85%
□ versus □	~60%

Explanation for Blindsight

- Some pathways may still remain from V1->V2
- Subcortical structures provide input to V2
- V1 particularly linked to phenomenal experience

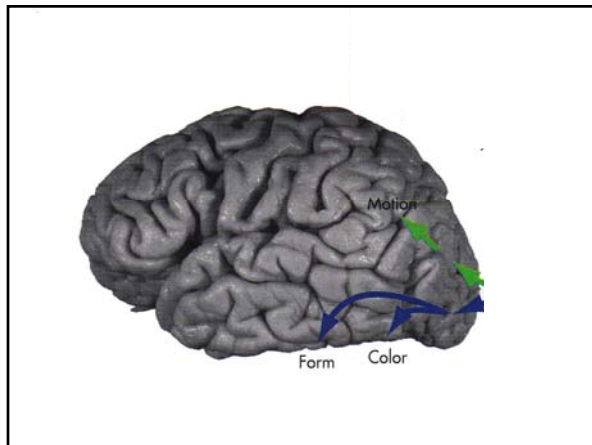




Motion blindness (The case of M.P.)



- Sees objects, but not:
 - whether they're moving
 - their direction or speed
- Sees the worlds in "snapshots"
- M.P.: "When I'm looking at a car first, it seems far away. But then when I want cross the road, suddenly the car is very near."
- Bilateral lesion in temporoparietal cortex



Prosopagnosia

- Patient P.T.
- Left-hemisphere stroke
- No longer recognized (visually) people around him, including his wife
- Easily recognized people after hearing their voice
- Demonstrated a curious dissociation

Prosopagnosia



Detail from "Luncheon on the Grass"
Monet, 1886

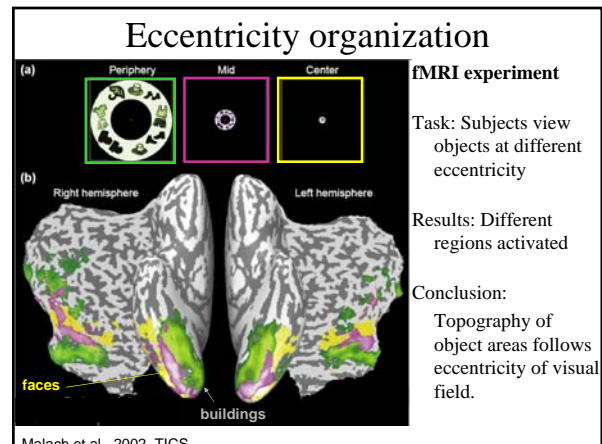
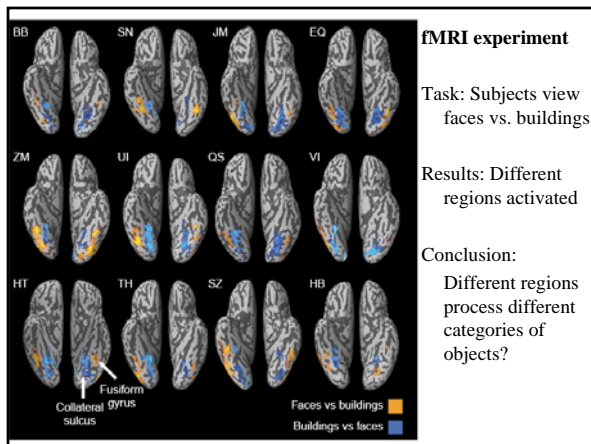
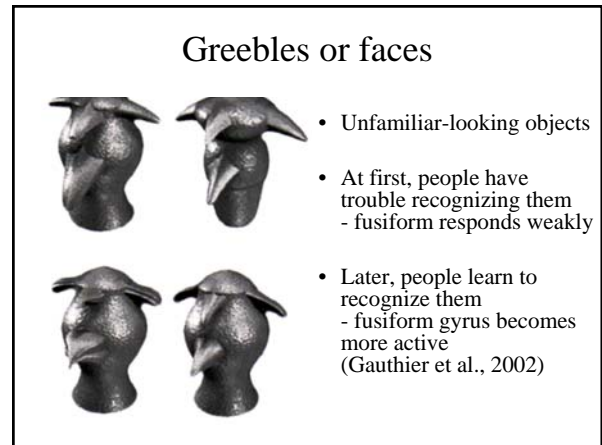
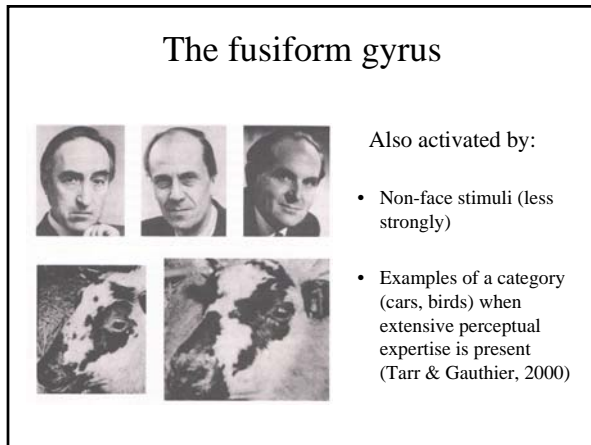
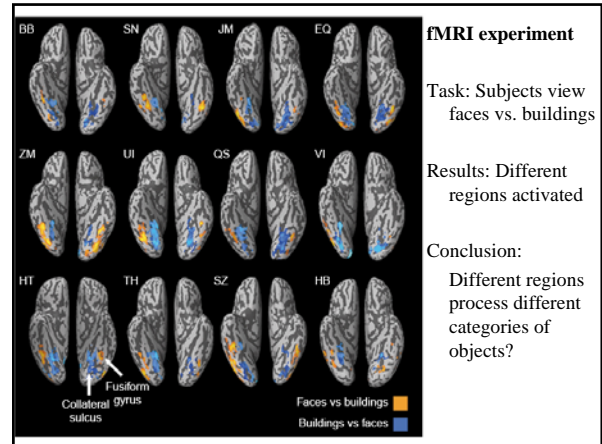
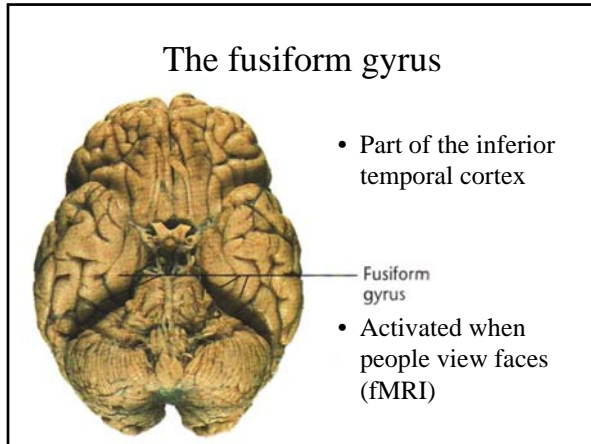


"Weeping Woman"
Picasso, 1937

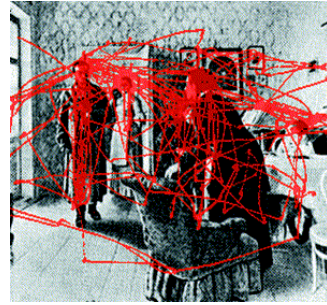
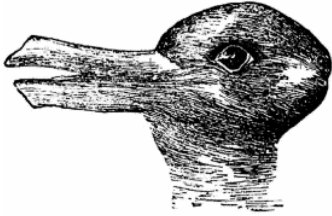
A different type of agnosia



- Closed head injury (Moscovitch et al., 1997, J. Cogn. Neurosci.)
- Patient
 - could recognize faces of all kinds, but not the individual objects that compose the face
 - was not even aware that the faces were composed of objects



Visual field location and perceptual interpretation



Extracting meaning

Faces are:

- most often represented in foveal vision (in the center of visual field)
- much more important than other objects
- frequently encountered (expertise)
- seen in particular orientation
- processed holistically (in addition to part-by-part)

