Optical illusions - *The Art of Seeing*

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AMES ROOM

• Ames Room is a form of optical illusion.

• It was constructed by ophthalmologist Adelbert Ames.
• Observe this room. Take special note of the size, shape, color and details of the room.

• Can this boy really be that much bigger than the girl?
PHYSICS OF AMES ROOM

• Ames room is a distorted room that creates an optical illusion in which people or objects appear to grow or shrink when moving from one corner to the other.
OPTICAL ILLUSION-DEFINITION

• Optical illusion is an apparently inexplicable discrepancy between the appearance of a visual stimulus and its physical reality.

• It is a Visually perceived image that is deceptive or misleading.
AMES ROOM-EXPLANATION

• The floor and the ceiling are tilted such that the distance between them is varying.
• As a result the distance between a person head and the ceiling decreases or increases as he or she walks along the wall from the end close to the door towards the end opposite to the hole or vice versa.
• Hence the person observing this from the hole perceives gigantism/dwarfism
ROOM DESIGN

When a viewer looks through the hole s/he assumes that the room is rectangular and the image cast onto the retina is consistent with this hypothesis.
THANKS