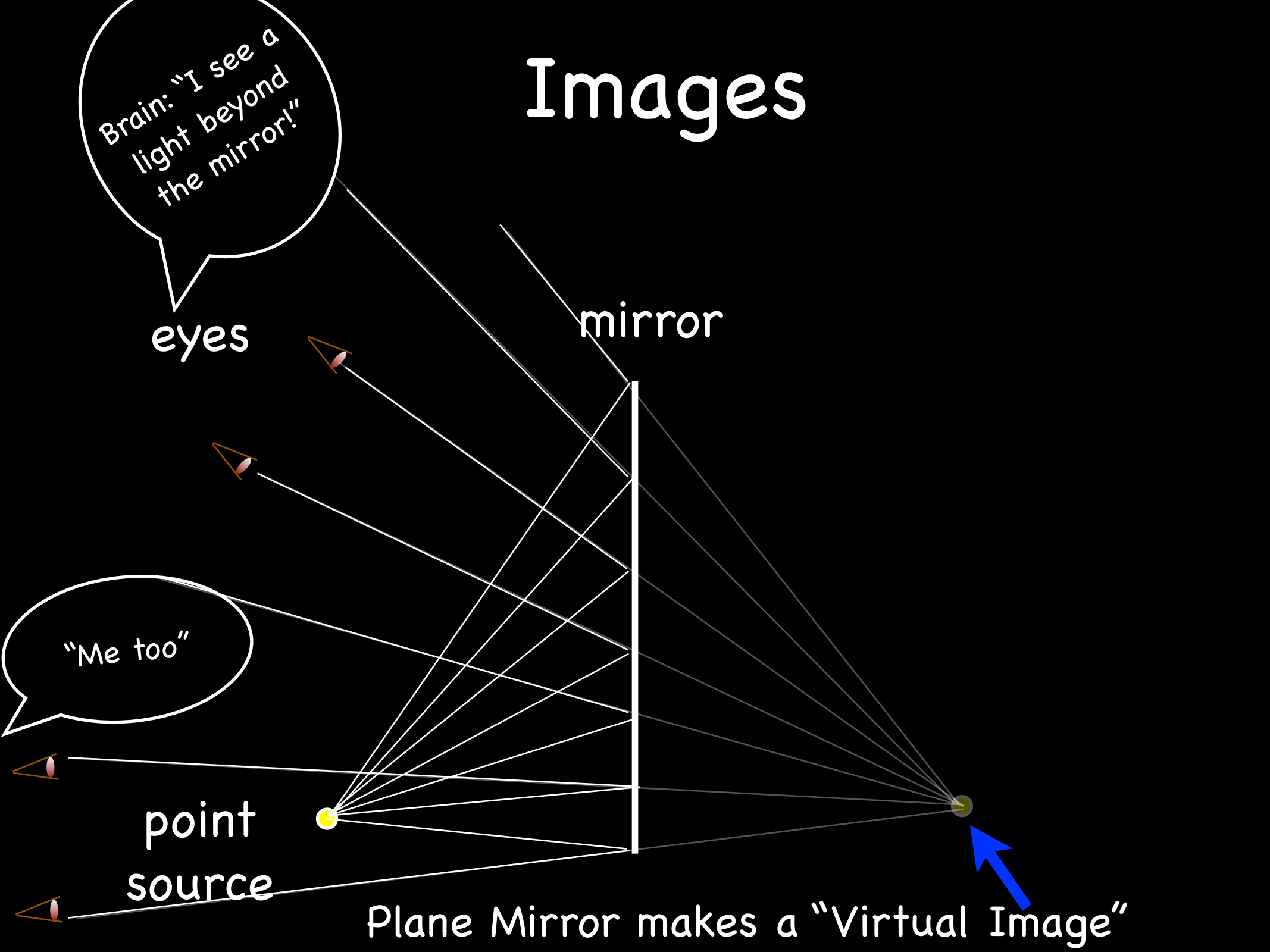
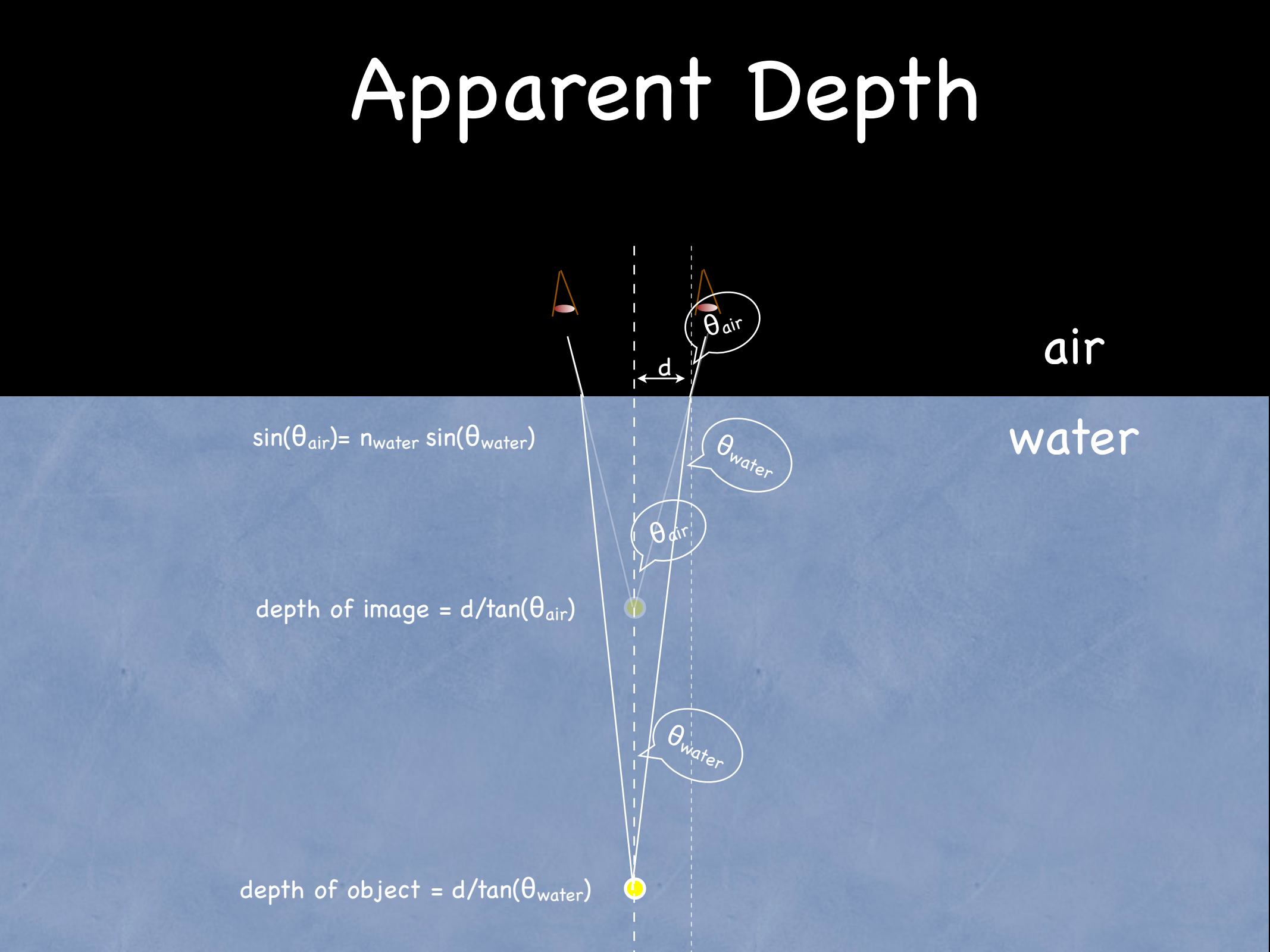
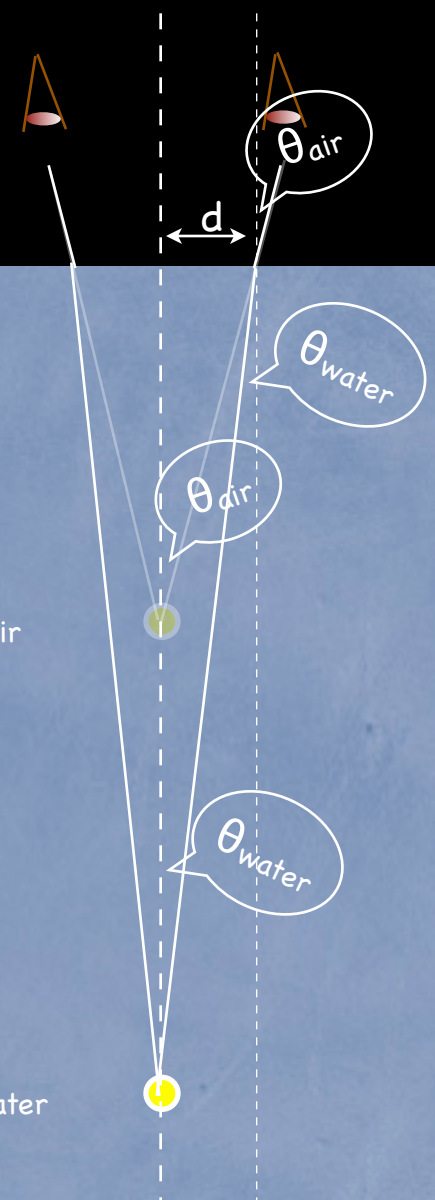
Images


Brain: "I see a light beyond the mirror!"
eyes
mirror
"Me too"
point source
Plane Mirror makes a "Virtual Image"

Apparent Depth



Apparent Depth



air

water

n_{water}=1.33

small angles: $\theta_{air} = n_{water}\,\theta_{water}$

(angles in radians)

$\frac{\text{depth of object}}{\text{depth of image}} = \frac{\theta_{air}}{\theta_{water}}$

$\frac{\text{depth of object}}{\text{depth of image}} = n_{water}$

0.75 m depth of image = d/θ_{air}

1.00 m depth of object = d/θ_{water}

For example if the object is 1 m deep,
n_{water}=1.33,
the image is 0.75 m deep.