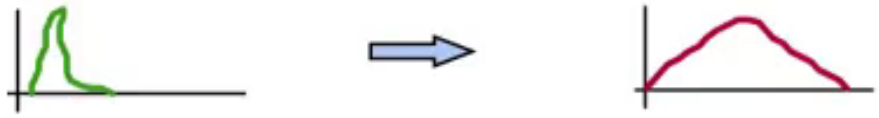
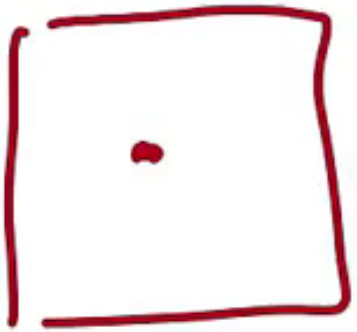
Contrast Enhancement

- Contrast enhancement via image deformations
  - Approach: Histogram modification





$$\frac{\partial I(x,y)}{\partial t} = I(x,y) - (\#pixels\ of\ value \geq I(x,y))$$

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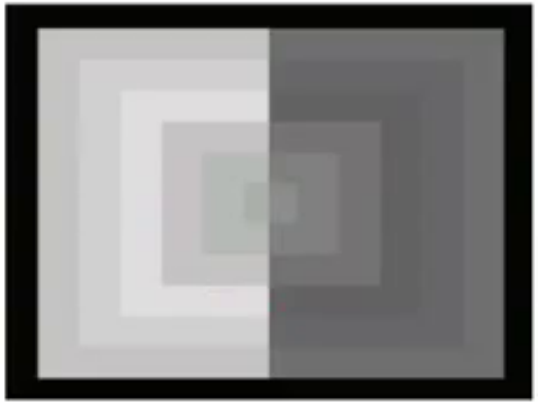
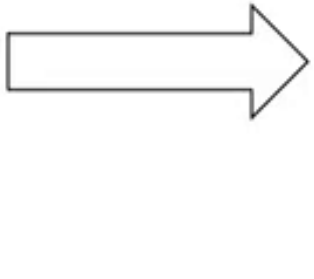
$$U(I) = \frac{1}{2}\int [I(\vec{x})-1/2]^2\, d\vec{x} - \frac{1}{4}\iint [I(\vec{x})-I(\vec{z})]\, d\vec{x}\, d\vec{z}$$





- Images courtesy JDE and IEEE