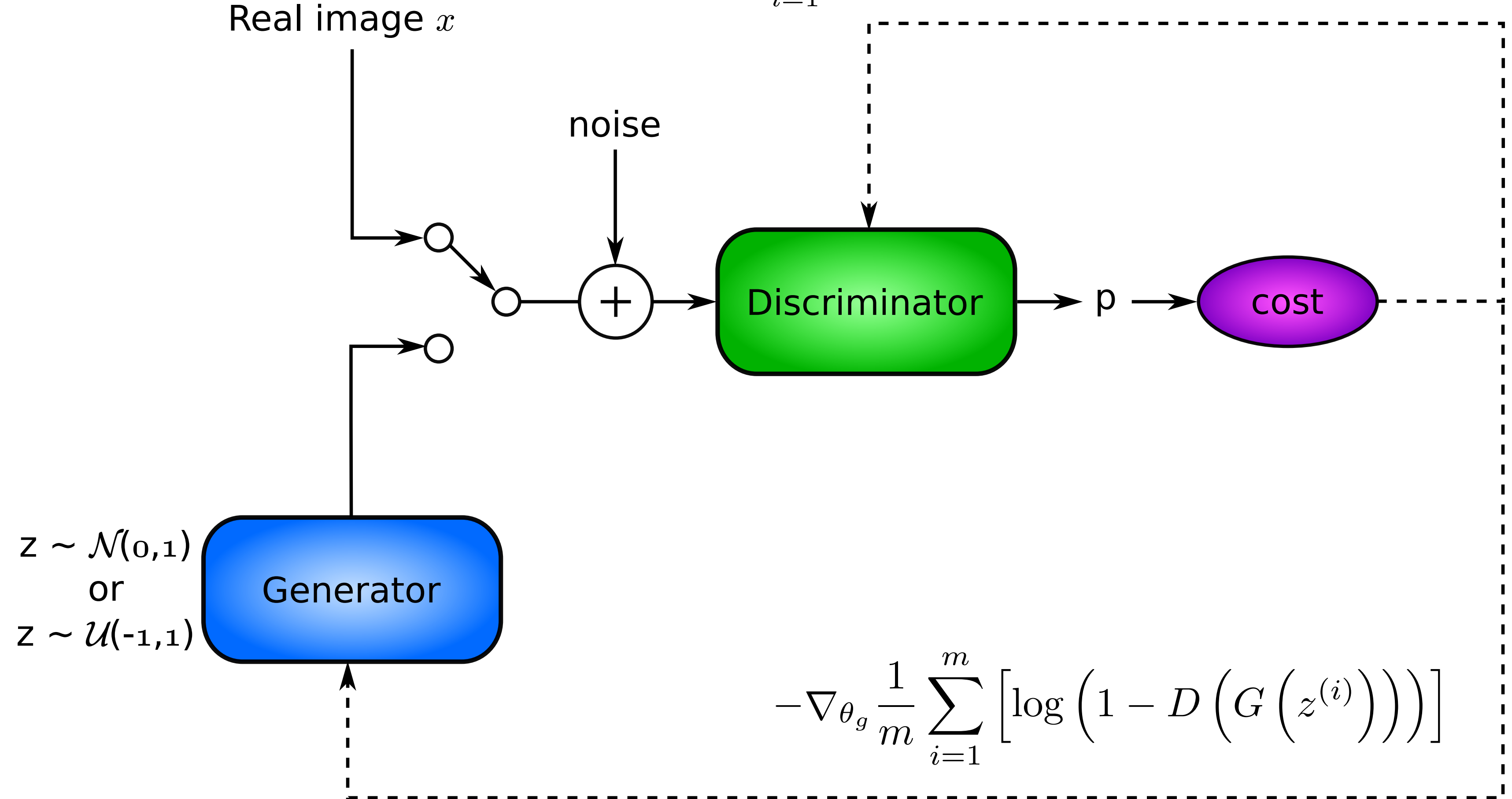


$$\nabla_{\theta_d} \frac{1}{m} \sum_{i=1}^m \left[\log D \left(x^{(i)} \right) + \log \left(1 - D \left(G \left(z^{(i)} \right) \right) \right) \right]$$



$$z \sim \mathcal{N}(0,1)$$

or

$$z \sim \mathcal{U}(-1,1)$$

Generator

Discriminator

cost

p

noise

Real image x

$$-\nabla_{\theta_g} \frac{1}{m} \sum_{i=1}^m \left[\log \left(1 - D \left(G \left(z^{(i)} \right) \right) \right) \right]$$