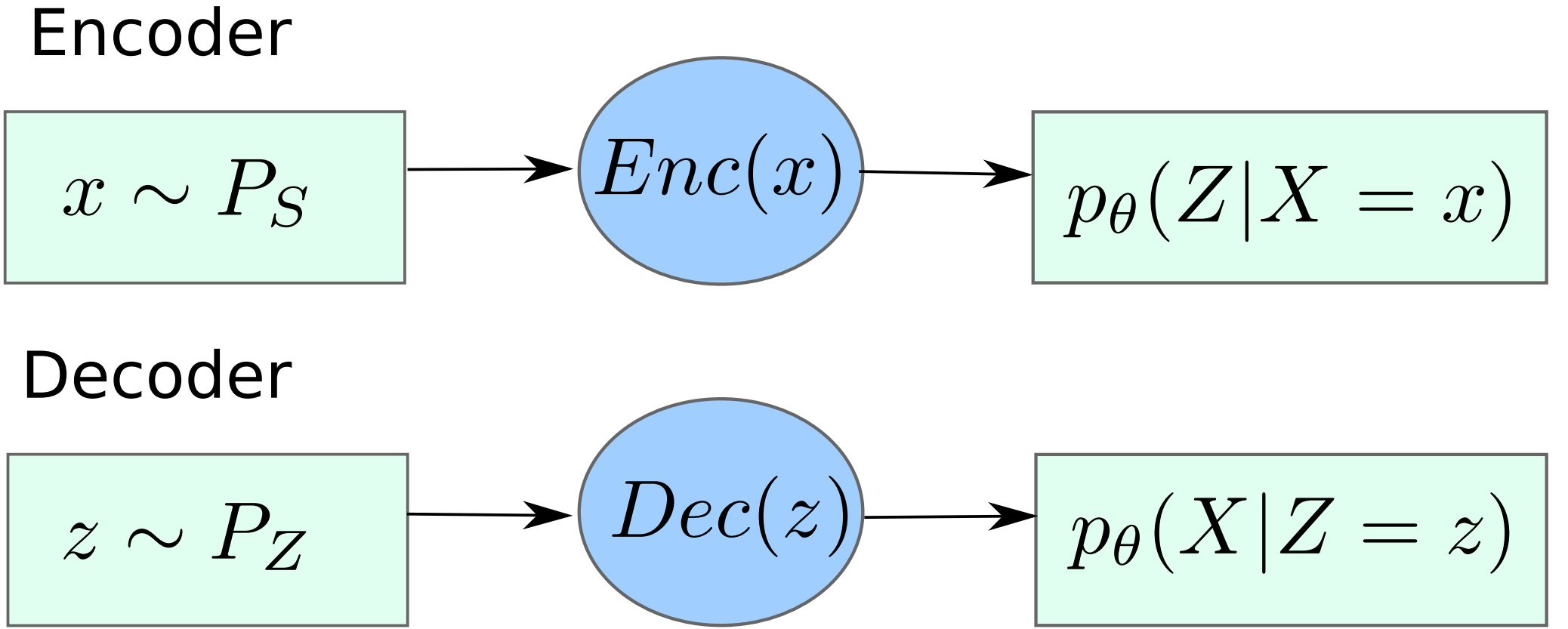
Encoder
$x \sim P_S$
$Enc(x)$
$p_\theta(Z|X = x)$
Decoder
$z \sim P_Z$
$Dec(z)$
$p_\theta(X|Z = z)$