Dirichlet distribution

$$Dir(\theta|\alpha) = \frac{1}{B(\alpha)} \prod_{k=1}^{K} \theta_k^{\alpha_k - 1}$$

$$\alpha_k > 0 \qquad (0, 0, 1)$$

$$(0.3, 0.1, 0.5)$$

$$(1, 0, 0) \qquad (0, 1, 0)$$

