

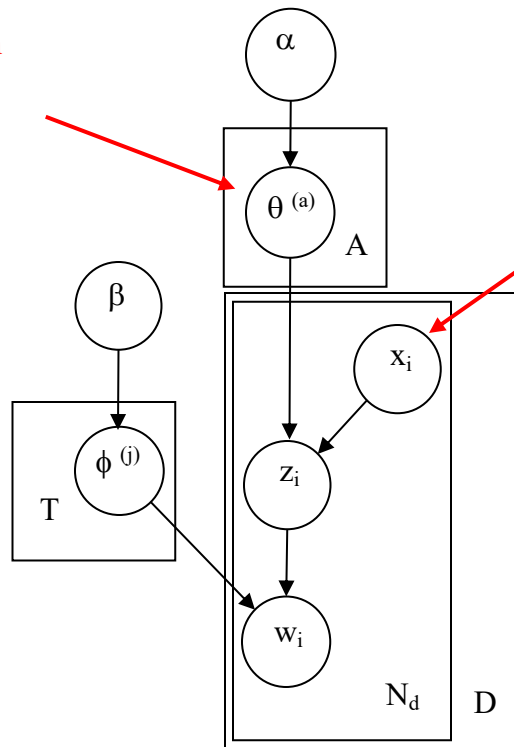
The Author-Topic model

[Rosen-Zvi et al. 04]

each author has a distribution
over topics

$$\theta^{(a)} \sim \text{Dirichlet}(\alpha)$$

$$\phi^{(j)} \sim \text{Dirichlet}(\beta)$$



the author of each word is chosen
uniformly at random

$$x_i \sim \text{Uniform}(A^{(d)})$$

$$z_i \sim \text{Discrete}(\theta^{(x_i)})$$

$$w_i \sim \text{Discrete}(\phi^{(z_i)})$$