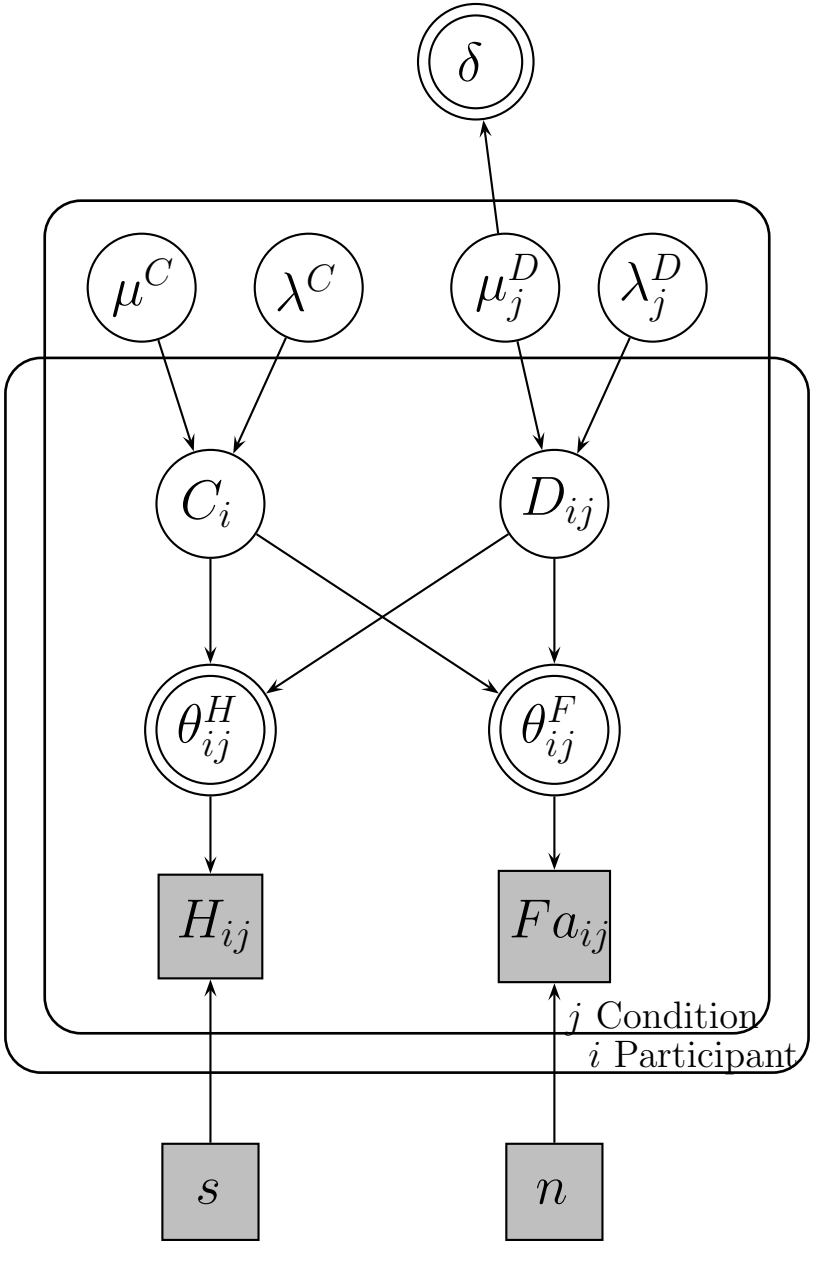

$$H_{ij} \sim \text{Binomial}\big(\theta_{ij}^H, s\big)$$

$$Fa_{ij} \sim \text{Binomial}\big(\theta_{ij}^F, s\big)$$

$$\theta_{ij}^H \leftarrow \phi(\tfrac{1}{2}D_{ij} - C_{ij})$$

$$\theta_{ij}^F \leftarrow \phi(-\tfrac{1}{2}D_{ij} - C_{ij})$$

$$D_{ij} \sim \text{Gaussian}\big(\mu_j^D, \lambda_j^D\big)$$

$$C_i \sim \text{Gaussian}\big(\mu^C, \lambda^C\big)$$

$$\mu^C, \mu_j^D \sim \text{Gaussian}\big(0, 0.001\big)$$

$$\lambda^C, \lambda_j^D \sim \text{Gamma}\big(.001, .001\big)$$

$$\delta \leftarrow \mu_1^D - \mu_2^D$$