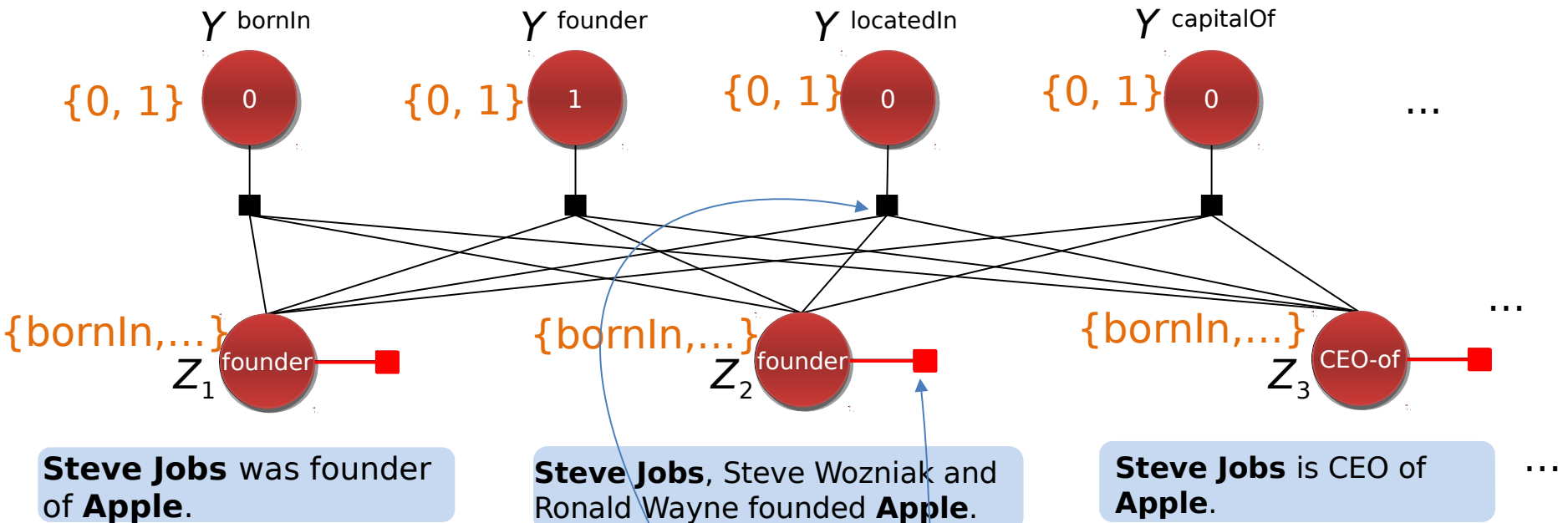


Model

Steve Jobs, Apple:



$$p(\mathbf{Y} = \mathbf{y}, \mathbf{Z} = \mathbf{z} | \mathbf{x}; \theta) \stackrel{\text{def}}{=} \frac{1}{Z_x} \prod_r \Phi^{\text{join}}(y^r, \mathbf{z}) \prod_i \Phi^{\text{extract}}(z_i, x_i)$$

$$\Phi^{\text{join}}(y^r, \mathbf{z}) \stackrel{\text{def}}{=} \begin{cases} 1 & \text{if } y^r = \text{true} \wedge \exists i : z_i = r \\ 0 & \text{otherwise} \end{cases}$$

All features at sentence-level

(join factors are deterministic ORs)