

$$\alpha_0, \beta_0$$

$$\alpha_1, \beta_1$$

$$\theta_{11}, \theta_{22}, \dots, \theta_{KK}$$

$$\theta_{12}, \theta_{13}, \ldots, \theta_{1K}$$

$$\theta_{21}, \theta_{23}, \ldots, \theta_{2K}$$

. . .

$$\theta_{K1}, \theta_{K2}, \dots, \theta_{K(K-1)}$$

$$\begin{pmatrix} \theta_{11} & \theta_{12} & \cdots & \theta_{1K} \\ \theta_{21} & \theta_{22} & \cdots & \theta_{2K} \\ \vdots & \vdots & \ddots & \vdots \\ \theta_{K1} & \theta_{K2} & \cdots & \theta_{KK} \end{pmatrix}$$

$$\begin{pmatrix} X_{11}^{B} & X_{12}^{B} & \cdots & X_{1K}^{B} \\ X_{21}^{B} & X_{22}^{B} & \cdots & X_{2K}^{B} \\ \vdots & \vdots & \ddots & \vdots \\ X_{K1}^{B} & X_{K2}^{B} & \cdots & X_{KK}^{B} \end{pmatrix}$$