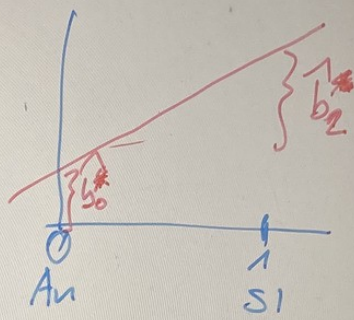
Q Difference between body weight of Si and An: (4)

+ M_{AN} as before

+ M_{Si} as group mean of body weight of Si animals

$$\begin{bmatrix} M_{AN} \\ M_{Si} \end{bmatrix} = \begin{bmatrix} 1 & 0 \\ 1 & 1 \end{bmatrix} \cdot \begin{bmatrix} \hat{b}_0 \\ a \\ b_2 \end{bmatrix}$$



□ Combine:

$$w = \begin{bmatrix} M_{AN} \\ M_{A1} \\ M_{Si} \end{bmatrix} = \begin{bmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ 1 & 0 & 1 \end{bmatrix} \cdot \begin{bmatrix} \hat{b}_0 \\ a \\ b_1 \\ a \\ b_2 \end{bmatrix} = L^T \cdot \hat{b}$$

known — known — unknown → solve for $\hat{b}$

$$\underbrace{(L^T)^{-1}}_{\text{contains estimable functions}} \cdot w = \hat{b}$$