$$\underbrace{\begin{bmatrix} 1 & 0 \\ 0 & 1 \\ -1 & -1 \end{bmatrix}}_{Contrast} \underbrace{\begin{bmatrix} \sigma_1^2 & \sigma_{12} \\ \sigma_{21} & \sigma_2^2 \end{bmatrix}}_{\substack{Covariance \\ Matrix}} \underbrace{\begin{bmatrix} 1 & 0 & -1 \\ 0 & 1 & -1 \end{bmatrix}}_{Contrast^T} = \underbrace{\begin{bmatrix} \sigma_1^2 & \sigma_{12} & -\sigma_1^2 - \sigma_{12} \\ \sigma_{21} & \sigma_2^2 & -\sigma_2^2 - \sigma_{21} \\ -\sigma_1^2 - \sigma_{21} & -\sigma_2^2 - \sigma_{12} & \sigma_1^2 + \sigma_2^2 + \sigma_{12} + \sigma_{21} \end{bmatrix}}_{Covariance\ Matrix\ (Reconstructed)}$$