$$q_A(\mathbf{u}_A|\mathbf{y}_A)$$

$$q_B(\mathbf{u}_B|\mathbf{y}_B)$$

$$q_B(\mathbf{u}_B|\mathbf{y}_B, \mathbf{y}_{AB})$$

$$q_A(\mathbf{u}_A|\mathbf{y}_A, \mathbf{y}_{BA})$$

$$\mathbf{y}_{AB}$$

$$\mathbf{y}_{BA}$$

$$\mathbf{y}_{AB} = g_A(\mathbf{u}_A)$$

$$\mathbf{y}_{BA} = g_B(\mathbf{u}_B)$$