$$\begin{array}{ccc} \mathcal{W} \times \mathcal{W} & & \mathcal{W} \\ (u_1, v_1) & \xrightarrow{(\gamma, \beta)} & (u_2, v_2) & \text{maps to} & \mathcal{W} \\ & u \otimes v & \xrightarrow{\gamma \otimes \beta} & u' \otimes v' \end{array}$$