

$$\begin{array}{ccc}
X^p \otimes Y^q & \xrightarrow{\varepsilon(p,q) \cdot \tau} & Y^q \otimes X^p \\
d \downarrow & & \downarrow d \\
X^{p+1} \otimes Y^q & \xrightarrow{\varepsilon(p+1,q) \cdot \tau} & Y^q \otimes X^{p+1} \\
\oplus & \oplus & \oplus \\
X^p \otimes Y^{q+1} & \xrightarrow{\varepsilon(p,q+1) \cdot \tau} & Y^{q+1} \otimes X^p
\end{array}$$