

$$\begin{array}{c}
 \text{id}_Y \otimes \eta_X \\
 \text{---} \xrightarrow{\quad} \text{---} \\
 Y \otimes X \otimes X^\vee \xrightarrow{f \otimes \text{id}_X} Z \otimes X \otimes X^\vee \xrightarrow{\text{id}_Z \otimes \text{br}} Z \otimes X^\vee \otimes X \xrightarrow{\text{id}_Z \otimes \epsilon_X} Z
 \end{array}$$