

$$\begin{array}{c}
 \text{id}_Y \otimes \text{coev} \\
 \xrightarrow{\quad} Y \otimes X \otimes X^v \\
 \xrightarrow{\quad} f \otimes \text{id}_Z \otimes X^v \\
 \xrightarrow{\quad} \text{id}_Z \otimes \text{br} \\
 \xrightarrow{\quad} \text{id}_Z \otimes \text{ev} \\
 \xrightarrow{\quad} Z
 \end{array}$$