

$$\begin{array}{ccc}
T(A) \otimes T(B) \otimes T(C) & \xrightarrow{y_{A,B} \otimes 1} & T(B) \otimes T(A) \otimes T(C) \\
1 \otimes B_{B,C} \swarrow & & \searrow 1 \otimes y_{A,C} \\
T(A) \otimes T(C) \otimes T(B) & & T(B) \otimes T(C) \otimes T(A) \\
y_{A,C} \otimes 1 \searrow & & \swarrow y_{B,C} \otimes 1 \\
T(C) \otimes T(A) \otimes T(B) & \xrightarrow{1 \otimes y_{A,B}} & T(C) \otimes T(B) \otimes T(A)
\end{array}$$