

$$\begin{array}{c|ccc}
W_1 & W_2 & W_1 & W_2 \\
\downarrow & & \downarrow & & \downarrow \\
\hline
f_1 \otimes f_2 & & \downarrow & & \downarrow \\
\downarrow & & \downarrow & & \downarrow \\
V_1 & V_2 & & V_1 & V_2
\end{array}$$

$$\begin{array}{ccc} V^* & V & V \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

$$\bigvee = \bigvee^{V} (\mathrm{id}_{V})$$

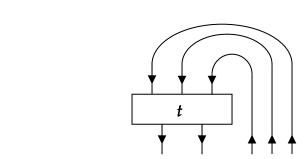
$$=\bigvee_{i=1}^{V}(\mathrm{id}_{V^*})$$

$$\widetilde{\eta}_{V} \stackrel{!}{\stackrel{!}{\longrightarrow}} I \\
\downarrow^{*}V \quad V \qquad \qquad \downarrow^{*}V$$

$$\widetilde{\epsilon}_{V} \bigvee_{i=1}^{V} I \Rightarrow V$$

$$\widetilde{\eta}_{V} \stackrel{\mathsf{V}}{\longrightarrow} I \qquad \qquad \widetilde{\epsilon}_{V} \stackrel{\mathsf{V}}{\longrightarrow} V \qquad \qquad \widetilde{\epsilon}_{V} \stackrel{\mathsf{V}}{\longrightarrow} I \qquad \qquad \widetilde{\mathsf{V}} \qquad \qquad \mathsf{V} \qquad \qquad \mathsf{V} \qquad \mathsf{V}$$

$$*f$$
 = f



$$\operatorname{tr}_{\operatorname{left}}(f) = f$$

$$\operatorname{tr}_{\operatorname{left}}(f) = \left\{ \begin{array}{c} \\ f \\ \end{array} \right\}$$

