

$$\begin{array}{ccc}
C_*^e(X) \otimes C_*^e(S^V) \otimes C_*^e(S^W) & & \\
\downarrow 1 \otimes 1 \otimes (-)^* & & \\
C_*^e(X) \otimes C_*^e(S^V) \otimes C_{-*}^e(S^{-W}) & & \\
\downarrow \otimes & & \\
C_*^e(\Sigma^{V-W} X) & \xrightarrow{H_*} & H_{*-(V-W)}^e(X) \\
\downarrow Tr & & \\
C_*^{C_2}(\Sigma^{V-W} X) & \xrightarrow{H_*} & H_{*-(V-W)}^{C_2}(X) \\
\downarrow Tr & & \\
C_*^{C_4}(\Sigma^{V-W} X) & \xrightarrow{H_*} & H_{*-(V-W)}^{C_4}(X)
\end{array}$$