

$$\begin{array}{ccc}
 \mathbf{E}(X, Y) \otimes \mathbf{E}(Y, Z) & \xrightarrow{\text{co}_{X,Y,Z}} & \mathbf{F}(X, Z) \\
 F_{X,Y} \otimes F_{Y,Z} \downarrow & & \downarrow F_{X,Z} \\
 \mathbf{E}(FX, FY) \otimes \mathbf{E}(FY, FZ) & \xrightarrow{\text{co}_{FX,FY,FZ}} & \mathbf{F}(FX, FZ)
 \end{array}$$