

$$\begin{array}{ccc}
H \circ F(x) & \longrightarrow & H \circ F(y) \\
H(\varphi_x) \downarrow & & \downarrow H(\varphi_y) \\
H \circ G(\Gamma(x)) & \longrightarrow & H \circ G(\Gamma(y))
\end{array}$$

$$\begin{array}{ccc}
H \circ G(x) & \longrightarrow & H \circ G(y) \\
H(\psi_x) \downarrow & & \downarrow H(\psi_y) \\
H \circ F(K(x)) & \longrightarrow & H \circ F(K(y))
\end{array}$$