

$$\begin{array}{ccc}
 F(x) & \xrightarrow{F(\eta_{K(\Gamma(x))})} & F(K(\Gamma(x))) \\
 \searrow \varphi_x & & \nearrow \psi_{\Gamma(x)} \\
 & G(\Gamma(x)) &
 \end{array}
 \qquad
 \begin{array}{ccc}
 G(x) & \xrightarrow{G(\eta_{\Gamma(K(x))})} & G(\Gamma(K(x))) \\
 \searrow \psi_x & & \nearrow \varphi_{K(x)} \\
 & F(K(x)) &
 \end{array}$$