

$$\begin{array}{ccc}
 (F\Delta, \varphi(\delta)) & \Longrightarrow & ((Ff)^*(Fg)_*(F\Delta), (Ff)^*(Fg)_*\varphi(\delta)) \\
 \uparrow & & \\
 (\Delta, \delta) & & ((Ff)^*(Fg)_*(F\Delta), \varphi(f^*g_*\delta)) \\
 \downarrow & & \uparrow \\
 (f^*g_*\Delta, f^*g_*\delta) & \Longrightarrow & (F(f^*g_*\Delta), \varphi(f^*g_*\delta))
 \end{array}$$