

$$\begin{array}{ccccc}
 & D & & D & \xrightarrow{u} & F(A) \\
 & \swarrow u & \searrow f & \swarrow f & & \downarrow F(h) \\
 F(A) & \xrightarrow{F(h)} & F(A') & & & F(A') \\
 & & & & & \downarrow h \\
 & & & & & A'
 \end{array}$$