

$$\begin{array}{ccc}
 X & \xrightarrow{i} & U(F(X)) \\
 & \searrow g & \downarrow U(h) \\
 & & U(A)
 \end{array}
 \qquad
 \begin{array}{ccc}
 & & F(X) \\
 & & \downarrow h \\
 & & A
 \end{array}$$