

$$\begin{array}{ccc}
 A & \xleftarrow{\text{eval}_A} & A^Y \times Y \\
 \swarrow g & & \uparrow (h, \text{id}_Y) \\
 & & X \times Y \\
 & & \uparrow h \\
 & & X
 \end{array}$$

$$\begin{array}{ccc}
 B & \xleftarrow{\text{eval}_B} & B^Y \times Y \\
 \swarrow g' & & \uparrow (h', \text{id}_Y) \\
 & & X \times Y \\
 & & \uparrow h' \\
 & & X
 \end{array}$$