

$$\begin{array}{ccc}
 X \times \{0\} \cup A \times [0, 1] & \xrightarrow{\bar{f}} & E \\
 \downarrow & \nearrow \bar{h} & \downarrow p \\
 X \times [0, 1] & \xrightarrow{h} & B
 \end{array}$$