

$$\begin{array}{ccccccc}
 (A, X) & \xrightarrow{p_*} & (A, Z) & \xrightarrow{\quad \varepsilon! \quad} & \mathbb{E}(A, K) & \longrightarrow & \bullet \\
 \downarrow \delta! & & \downarrow \delta! & \searrow & \nearrow & \downarrow & \downarrow \\
 & & & \text{im } \varepsilon! & & & \\
 \mathbb{E}(C, X) & \hookrightarrow & \mathbb{E}(C, Y) & \xrightarrow{\quad} & \frac{\mathbb{E}(C, Y)}{\mathbb{E}(C, X)} & \sqcup_{\text{im } \varepsilon!} \mathbb{E}(A, K) & \longrightarrow \bullet \\
 & & \searrow & \downarrow \text{dashed} & \nearrow & & \\
 & & & \frac{\mathbb{E}(C, Y)}{\mathbb{E}(C, X)} & & & 
 \end{array}$$