

$$\begin{array}{ccc}
 \mathcal{P}(A) \times \{\bullet\} & \xrightarrow{\rho} & \mathcal{P}(A) \\
 \downarrow 1 \times \varepsilon & & \uparrow \mathcal{P}(\rho) \\
 \mathcal{P}(A) \times \mathcal{P}(\{\bullet\}) & \xrightarrow{\varphi} & \mathcal{P}(A \times \{\bullet\})
 \end{array}
 \qquad
 \begin{array}{ccc}
 \{\bullet\} \times \mathcal{P}(A) & \xrightarrow{\lambda} & \mathcal{P}(A) \\
 \downarrow \varepsilon \times 1 & & \uparrow \mathcal{P}(\lambda) \\
 \mathcal{P}(\{\bullet\}) \times \mathcal{P}(A) & \xrightarrow{\varphi} & \mathcal{P}(\{\bullet\} \times A)
 \end{array}$$