

$$\begin{array}{ccc}
 P(a) & \xrightarrow{\alpha_{P,a}} & \text{hom}(\mathcal{Y}(a), P) \\
 \tau(p) \downarrow & & \downarrow \text{hom}(\mathcal{Y}(p), \tau) \\
 P'(a') & \xrightarrow{\alpha_{P',a'}} & \text{hom}(\mathcal{Y}(a'), P')
 \end{array}$$