$$\begin{array}{ccc}
\langle a,1\rangle & \longmapsto & a \\[1em]
\mathbf{A}+\emptyset & \xrightarrow{\ \mathrm{ru}_{\mathbf{A}}\ } & \mathbf{A} \\[0.5em]
{\scriptstyle f+\mathrm{Id}_{\emptyset}}\Big\downarrow & & \Big\downarrow{\scriptstyle f} \\[0.5em]
\mathbf{A}'+\emptyset & \xrightarrow{\ \mathrm{ru}_{\mathbf{A}'}\ } & \mathbf{A}' \\[1em]
\langle f(a),1\rangle & \longmapsto & f(a)
\end{array}$$