

$$\begin{array}{ccccc}
V & \xrightarrow{\phi_{T,\mathcal{E}}} & V & = & V \\
& \uparrow \phi_{M,\mathcal{E}_0} & \uparrow \phi_{M,\mathcal{E}_0} & & \uparrow \ell_{\mathcal{E}_0} \\
& V & V & & \\
& \uparrow \ell_{\mathcal{E}_0} & \uparrow \ell_{\mathcal{E}_0} & & \\
K^{n+1} & \xrightarrow{a \mapsto Ta} & K^{n+1} & \xrightarrow{a \mapsto Ma} & K^{n+1}
\end{array}$$