

$$V^* \xlongequal{\hspace{1cm}} V^*$$

$$K^{n+1} \xrightarrow[a \mapsto Ta]{} K^{n+1}$$

$$\ell_{\mathcal{E}} \uparrow$$

$$\ell'_{\mathcal{E}} \uparrow$$

$$x_j \xlongequal{\hspace{1cm}} \sum_{i=0}^n t_{ij} y_i$$

$$\mathbf{e}_j \xrightarrow{\hspace{1cm}} \sum_{i=0}^n t_{ij} \mathbf{e}_i$$

$$\uparrow$$

$$\uparrow$$