

$$\mathbb{1}_{\underline{K}^C}^{\perp} = \mathbb{1}_{\underline{K}^C} \triangleleft \mathbb{1}_{\underline{K}^C}^{\perp} = \frac{\mathfrak{b} \in \mathbb{1}_{\underline{K}^C}}{\bigwedge_{\mathfrak{b} \in \mathbb{1}_{\underline{K}^C}} \mathfrak{b} \times \mathfrak{b} = \mathfrak{b} \mathbb{1} \mathfrak{b}}$$

2' choices  $\circ \subset \diamond \subset \square$

$$0 = \mathbb{1}_{\square} \underline{K} \sqsubset \mathbb{1}_{\diamond} \underline{K} = \mathbb{1}_{\circ} \underline{K} \triangleleft \mathbb{1}_{\diamond} = \frac{\mathfrak{b} \in \mathbb{1}_{\circ} \underline{K}}{\mathfrak{b} | \diamond = 0} \sqsubset \mathbb{1}_{\diamond} \underline{K}$$

$$\mathbb{R}_{\diamond}^{\perp} \underline{K} = \mathbb{R}_{\underline{K}} \triangleleft \mathbb{1}_{\diamond} \underline{K} = \mathbb{R}_{\diamond}^{\perp} \underline{K} \times \mathbb{1}_{\diamond} \underline{K}$$

$$\begin{aligned} \begin{Bmatrix} \mathbb{R}_{\diamond}^{\perp} \underline{K} \\ \mathbb{R}_{\diamond}^{\perp} \underline{K} \\ \mathbb{R}_{\diamond}^{\perp} \underline{K} \end{Bmatrix} &= \begin{Bmatrix} \mathbb{R}_{\circ}^{\perp} \underline{K} \\ \mathbb{R}_{\diamond}^{\perp} \underline{K} \end{Bmatrix} \times \mathbb{R}_{\diamond}^{\perp} \underline{K} = \mathbb{R}_{\diamond}^{\perp} \underline{K} \times \mathbb{1}_{\diamond} \underline{K} \times \mathbb{R}_{\diamond}^{\perp} \underline{K} \\ &= \times \mathbb{R}_{\diamond}^{\perp} \underline{K} \times \mathbb{R}_{\diamond}^{\perp} \underline{K} \end{aligned}$$

$$\mathbb{R}_{\diamond}^{\perp} \underline{K} = \frac{\mathbb{1}_{\circ}^{\perp} \underline{K}}{\mathbb{1}_{\diamond}^{\perp} \underline{K} \ni \mathbb{1} \in \langle \diamond \rangle} = \mathbb{R}_{\underline{K}} \cap \mathbb{R}_{\diamond}^{\perp} \underline{K}$$

$$\mathbb{R}_{\underline{K}} = \mathbb{R}_{\diamond}^{\perp} \underline{K} \times \mathbb{R}_{\diamond}^{\perp} \underline{K} = \overbrace{\mathbb{R}_{\diamond}^{\perp} \underline{K} \times \mathbb{R}_{\diamond}^{\perp} \underline{K}}^{\mathbb{R}_{\diamond}^{\perp} \underline{K}}$$

$$\mathbb{R}_{\diamond}^{\perp} \underline{K} = \frac{\mathbb{1}_{\circ}^{\perp} \underline{K}}{\mathbb{1}_{\diamond}^{\perp} \underline{K} \ni \mathbb{1} \notin \langle \diamond \rangle} = \mathbb{R}_{\underline{K}} \cap \mathbb{R}_{\diamond}^{\perp} \underline{K}^C = \mathbb{R}_{\diamond}^{\perp} \underline{K} \times \mathbb{R}_{\diamond}^{\perp} \underline{K} = \mathbb{R}_{\underline{K}} \cap \begin{Bmatrix} \mathbb{R}_{\diamond}^{\perp} \underline{K}^C \\ \mathbb{R}_{\diamond}^{\perp} \underline{K} \end{Bmatrix}$$

$$\mathbb{R}_{\diamond}^{\perp} \underline{K} = \mathbb{R}_{\diamond}^{\perp} \underline{K} \times \mathbb{R}_{\diamond}^{\perp} \underline{K}$$

$$\mathbb{R}_{\diamond}^{\perp} \underline{K} \stackrel{\text{cpt}}{\underset{\text{Car}}{\sqsubset}} \mathbb{R}_{\diamond}^{\perp} \underline{K} \Rightarrow \mathbb{R}_{\diamond}^{\perp} \underline{K} \stackrel{\text{ps}}{\underset{\text{cpt}}{\sqsubset}} \mathbb{R}_{\diamond}^{\perp} \underline{K} \times \mathbb{1}_{\diamond} \underline{K} \sqsubset_{\text{Car}} \mathbb{R}_{\diamond}^{\perp} \underline{K} \sqsubset_{\text{Car}} \mathbb{R}_{\underline{K}}$$

$$\mathbb{R}_{\underline{K}} = \underline{K} \stackrel{\text{max}}{\underset{\text{abel}}{\sqsubset}} \underline{K} = \mathbb{1}_{\circ} \underline{K} = \mathbb{R}_{\underline{K}} \times \mathbb{R}_{\circ} \underline{K} = \mathbb{1}_{\circ} \underline{K} \times \mathbb{R}_{\circ} \underline{K} \sum_{\mathbb{1} \neq 0} \mathbb{R}_{\mathbb{1}} \underline{K} = \mathbb{R}_{\underline{K}}$$

