

$$\sum_{\mathbb{1} \in \mathbb{1}_+^{\sharp}} \mathbb{1} \star \mathbb{1}^{\sharp} \xleftarrow[\text{monomet}]{\alpha} \mathbb{1}$$

OE $\mathbb{1}$ unit

$$\bigwedge_{0 \neq \mathbb{1} = \mathbb{1}^* \in \mathbb{1}} \bigvee_{\alpha_1}^{\text{cycl rep}} \mathbb{1} \notin \text{Ker } \alpha_1$$

$$\mathbb{C}^{-1} = \mathbb{h} \triangleleft_0 \mathbb{C} \Rightarrow \bigvee_{\mathbb{h} \in \mathbb{h}} \mathbb{h} \mathbb{1} \neq 0 \Rightarrow \bigvee_{\mathbb{1}_1 = \delta_{\mathbb{h}}}^{S(\mathbb{C}^{-1})} \mathbb{1}_1 \mathbb{1} = \mathbb{h} \mathbb{1} \neq 0$$

$$\overline{\mathbb{1}_1 | \mathbb{R}^{-1}} = \mathbb{1}_1 e = 1 \xrightarrow{\text{HB}} \bigvee \mathbb{R}^{-1} \sqsubset \mathbb{1}^{\circ} \xrightarrow[\text{lin}]{\tilde{\mathbb{1}}_1} \mathbb{R} \begin{cases} \tilde{\mathbb{1}}_1 & = 1 \\ \tilde{\mathbb{1}}_1 | \mathbb{R}^{-1} & = \mathbb{1}_1 \end{cases}$$

$$\mathbb{1} \in \mathbb{1}_+ \rightsquigarrow \overline{\mathbb{1}} \leq 1 \Rightarrow \overline{e - \mathbb{1}} \leq 1 \Rightarrow \overline{1 - \tilde{\mathbb{1}}_1 \mathbb{1}} = \overline{\tilde{\mathbb{1}}_1 (e - \mathbb{1})} \leq \overline{\tilde{\mathbb{1}}_1} \overline{e - \mathbb{1}} \leq 1 \Rightarrow \tilde{\mathbb{1}}_1 \mathbb{1} \leq 0 \Rightarrow \tilde{\mathbb{1}}_1 \in S(\mathbb{1})$$

$$\xrightarrow{\text{GNS}} \bigvee_{\alpha_1}^{\text{cycl rep}} \begin{cases} e_1 \text{ on } \mathbb{1}^1 \in \mathbb{C} \\ \tilde{\mathbb{1}}_1 \mathbb{1} = e_1 \star \binom{2}{\alpha_1} e_1 \end{cases}$$

$$\Rightarrow e_1 \star \binom{2}{\alpha_1} e_1 = \tilde{\mathbb{1}}_1 \mathbb{1} = \mathbb{1}_1 \mathbb{1} \neq 0 \Rightarrow \mathbb{1} \notin \text{Ker } \alpha_1$$

$$\alpha = \sum_{0 \neq \mathbb{1} = \mathbb{1}^* \in \mathbb{1}} \alpha_1 \text{ on } \mathbb{1} := \sum_{0 \neq \mathbb{1} = \mathbb{1}^* \in \mathbb{1}} \mathbb{1}^1$$

$$\Rightarrow \alpha \mathbb{1} = \binom{\alpha_1 \mathbb{1}}{\mathbb{1}} \mathbb{1} \neq 0$$

$$\overline{\alpha \mathbb{1}} = \bigvee_{0 \neq \mathbb{1} = \mathbb{1}^* \in \mathbb{1}} \overline{\alpha_1 \mathbb{1}} \leq \overline{\mathbb{1}} \Rightarrow \alpha \mathbb{1} \in \mathfrak{U} | \mathbb{1} \text{ bes}$$

$$\overline{\alpha} \leq 1$$

$$\text{Ker } \alpha = \bigcap_{0 \neq \mathbb{1} = \mathbb{1}^* \in \mathbb{1}} \text{Ker } \alpha_1 \not\neq \mathbb{1} \xrightarrow{*_{\text{inv}}} \text{Ker } \alpha = 0 \Rightarrow \alpha \text{ inj} \Rightarrow \alpha \text{ monometric}$$