

$$\mathcal{G}_{\dot{U}} \subset W \wedge \dot{U}/a \xrightarrow[\text{Lsg}]{\mathfrak{L}} \mathbb{L}/b \Rightarrow {}^{U \cap \dot{U}}\mathfrak{L} = {}^{U \cap \dot{U}}\mathfrak{L}'$$

$$a \in N = \begin{cases} t \in U \cap \dot{U} \\ t\mathfrak{L} = t'\mathfrak{L}' \end{cases} \subset U \cap \dot{U}$$

$$N \subset U \cap \dot{U}$$

$$c \in N \Rightarrow d = {}^c\mathfrak{L} = {}^c\mathfrak{L}' \Rightarrow c:d \in W \xrightarrow[\text{LIP}]{\Rightarrow} \bigvee_{\text{Lip}} \bar{\mathbb{R}}_\delta^c \times \bar{\mathbb{L}}_\varepsilon^d \subset W$$

$$\bar{\mathbb{R}}_\delta^c \underset{\text{OE}}{\subset} U \cap \dot{U} \xrightarrow[\text{eind}]{\text{PIC}} \bigvee_{\text{eind}} \bar{\mathbb{R}}_\delta^c/c \xrightarrow[\text{Lsg}]{\mathfrak{L}} \mathbb{L}/d$$

$$\Rightarrow \bar{\mathbb{R}}_\delta^c/c \xrightarrow[\text{Lsg}]{\mathfrak{L}:\mathfrak{L}'} \mathbb{L}/d \xrightarrow[\text{eind}]{\Rightarrow} \mathfrak{L} = \mathfrak{L}' = \mathfrak{L}' \Rightarrow \bar{\mathbb{R}}_\delta^c \subset N$$

$$U \cap \dot{U} \text{ prim} \Rightarrow N = U \cap \dot{U}$$

$$\max \text{Lsg} / \bigvee_{\text{max}}^{\text{eind}} \mathbb{I}/a \xrightarrow[\text{Lsg}]{\mathfrak{L}} \mathbb{L}/b$$

$$a \in \mathbb{I} = \bigcup_{\forall U/a \xrightarrow[\text{Lsg}]{\mathfrak{L}_U} \mathbb{L}/b} U \text{ off vall} \Rightarrow \text{well-def } \mathbb{I}/a \xrightarrow[\text{Lsg}]{\mathfrak{L} = \bigcup \mathfrak{L}_U} \mathbb{L}/b$$

$$\mathcal{G}_\iota \subset W$$

$$\mathcal{G}_\iota \ni a_n : b_n \rightsquigarrow c : d \in W \Rightarrow \bigvee_{\text{Lip}} \bar{\mathbb{R}}_\delta^c \times \bar{\mathbb{L}}_\varepsilon^B \subset W : d \in B \subset \mathbb{L} \Rightarrow \bigvee a_n : b_n \in \mathbb{R}_\delta^c \times B \Rightarrow a_n \in \mathbb{I} \cap \bar{\mathbb{R}}_\delta^c \text{ vall}$$

$$b_n = {}^{a_n}\iota \in B \Rightarrow \bigvee_{\text{eind}} \bar{\mathbb{R}}_\delta^c / a_n \xrightarrow[\text{Lsg}]{\downarrow} \mathbb{L} / b_n \Rightarrow \mathbb{I} \cap \bar{\mathbb{R}}_\delta^c / a_n \xrightarrow[\text{Lsg}]{\downarrow} \mathbb{L} / b_n$$

$$\Rightarrow \iota_{\mathbb{I} \cap \bar{\mathbb{R}}_\delta^c} = \downarrow \Rightarrow \text{well-def } \mathbb{I} \cup \bar{\mathbb{R}}_\delta^c / a \xrightarrow[\text{Lsg}]{\downarrow \cup} \mathbb{L} / b \xrightarrow{\max} \bar{\mathbb{R}}_\delta^c \subset \mathbb{I} \Rightarrow c \in \mathbb{I}$$

$$a_n : {}^{a_n}\iota \rightsquigarrow c : d \xrightarrow{\text{stet}} {}^c\iota = d \Rightarrow c : d \in \mathcal{G}_\iota$$