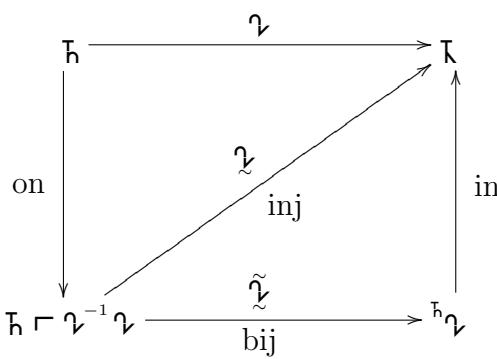


$\mathcal{V}^- \mathcal{V} \subset \mathbb{H} \times \mathbb{H}$ equ-rel

$$h \sim h \Leftrightarrow {}^h \mathcal{V} = {}^h \mathcal{V}$$

$$\mathcal{V}^- \mathcal{V}|_H = \frac{\mathcal{V}^- \mathcal{V}|_H}{h \in H}$$

$$\mathcal{V}^- \mathcal{V}|_H \mathcal{V} = {}^h \mathcal{V} \text{ well-def}$$



$$\overbrace{\mathcal{V}^- \mathcal{V}}^- = \mathcal{V}^- \mathcal{V} \text{ symm}$$

$$\mathcal{V} \text{ uberall def} \Rightarrow I_h \subset \mathcal{V}^- \mathcal{V} \text{ refl}$$

$$\mathcal{V} \text{ eind} \Rightarrow \mathcal{V} \mathcal{V}^- \subset I_k \Rightarrow \underbrace{\mathcal{V}^- \mathcal{V}} \underbrace{\mathcal{V}^- \mathcal{V}} = \mathcal{V}^- \underbrace{\mathcal{V} \mathcal{V}^-} \mathcal{V} \subset \mathcal{V}^- I_k = \mathcal{V}^- \mathcal{V} \text{ trans}$$

$$h:h \in \mathcal{V}^- \mathcal{V} \Leftrightarrow \bigvee_k \begin{cases} h:k \in \mathcal{V} \\ k:h \in \mathcal{V}^- \end{cases} \Rightarrow h:k \in \mathcal{V} \exists h:k \Rightarrow {}^h \mathcal{V} = k = {}^k \mathcal{V} \Rightarrow {}^h \mathcal{V} = {}^k \mathcal{V} \Rightarrow \mathcal{V} \text{ well-def}$$

$$\mathcal{V}^- \mathcal{V}|_h \mathcal{V} = \mathcal{V}^- \mathcal{V}|_h \mathcal{V} \Rightarrow {}^h \mathcal{V} = {}^h \mathcal{V} \Rightarrow h \sim h \Rightarrow \mathcal{V}^- \mathcal{V}|_h = \mathcal{V}^- \mathcal{V}|_h \Rightarrow \mathcal{V} \text{ inj}$$

$$\mathcal{V}^- \mathcal{V}|_h \mathcal{V} = {}^h \mathcal{V} \Rightarrow \tilde{\mathcal{V}} \text{ bij}$$