

$$\mathbb{C}: \quad \frac{a}{d} \left| \begin{matrix} b \\ c \end{matrix} \right. \in G$$

$$\overbrace{\eta a + \xi d}^* \underbrace{\eta b + \xi c}_* = \underline{\underline{a}} + \overbrace{d \dot{u} x \dot{u} b + c x^u \dot{g}^{\ddagger}}$$

$$\begin{aligned} \text{LHS} &= \underbrace{\dot{a}\dot{\eta} + \dot{d}\dot{\xi}}_{=x\dot{u}} \underbrace{\eta b + \xi c}_{*=x} = \dot{a} \underbrace{\dot{\eta}\eta}_{=x} b + \dot{a} \underbrace{\dot{\eta}\xi}_{=\dot{u}x\dot{u}} c + \dot{d} \underbrace{\dot{\xi}\eta}_{=\dot{u}x\dot{u}} b + \dot{d} \underbrace{\dot{\xi}\xi}_{=\dot{u}x} c \\ &= \dot{a}x\dot{u}b + \dot{a}xc + \dot{d}\dot{u}x\dot{u}b + \dot{d}\dot{u}xc = \text{ RHS} \end{aligned}$$