

$$\begin{array}{ccc}
\mathbb{C} & \xrightarrow[\text{bihol grp-iso}]{\times a} & \mathbb{C} \\
\downarrow +\underline{\Lambda} & & \downarrow +\underline{\Lambda}a \\
\mathbb{C} + \underline{\Lambda} & \xrightarrow[\times a]{\text{bihol grp-iso}} & \mathbb{C} + \underline{\Lambda}a
\end{array}$$

$\underline{z + \Lambda}a := za + \Lambda a: a \in \mathbb{C}^\times$ rotation

$$\begin{array}{ccc}
\mathbb{C} & \xrightarrow[\text{bihol}]{+b} & \mathbb{C} \\
\downarrow +\underline{\Lambda} & & \downarrow +\underline{\Lambda} \\
\mathbb{C} + \underline{\Lambda} & \xrightarrow[+b]{\text{bihol}} & \mathbb{C} + \underline{\Lambda}
\end{array}$$

$\underline{z + \Lambda} + b := \underline{z + b} + \Lambda$ translation

$$\mathbb{C} + \underline{\Lambda} \xrightarrow[\text{bihol}]{\tilde{\nu}} \mathbb{C} + \underline{\Lambda} \Rightarrow$$

$$\begin{array}{ccc}
\mathbb{C} & \xrightarrow[\text{bihol}]{\tilde{\nu}} & \mathbb{C} \\
\downarrow +\underline{\Lambda} & & \downarrow +\underline{\Lambda} \\
\mathbb{C} + \underline{\Lambda} & \xrightarrow[\tilde{\nu}]{\text{bihol}} & \mathbb{C} + \underline{\Lambda}
\end{array}$$

$$\Rightarrow \bigvee \begin{cases} a \in \mathbb{C}^\times \\ b \in \mathbb{C} \end{cases} \quad \Lambda a = \Lambda \quad z\tilde{\nu} = za + b$$