$$M \subset \underline{M}$$

$$\underline{M} \underset{K}{\times} G \ni \dot{x}{:}g = \dot{x}\, {}^{o}\underline{g}$$

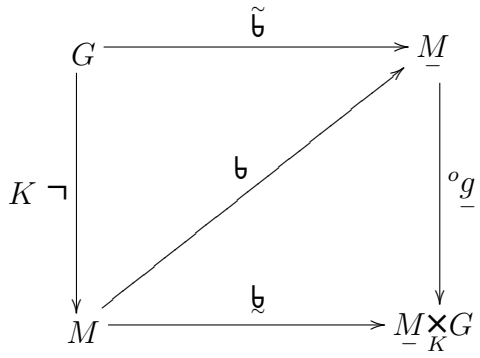
$$\widetilde{\mathfrak{b}}_g = \mathfrak{b}_{og}\, {}^{o}\underline{g}^{-1}$$

$$\mathfrak{b}_x = \widetilde{\mathfrak{b}}_{\gamma_x}\, {}^{o}\underline{\gamma_x}^{-1}$$

$$\underline{M}_x \ni \underset{\sim}{\mathfrak{b}}_x = \widetilde{\mathfrak{b}}_{\gamma_x}\, {}^{o}\underline{\gamma_x}^{-1} = \mathfrak{b}_x \in \underline{M}$$

$$\mathfrak{b}_x \underset{\dot{x}}{\barwedge} \mathfrak{b}_x = \widetilde{\mathfrak{b}}_{\gamma_x} \barwedge \widetilde{\mathfrak{b}}_{\gamma_x}$$

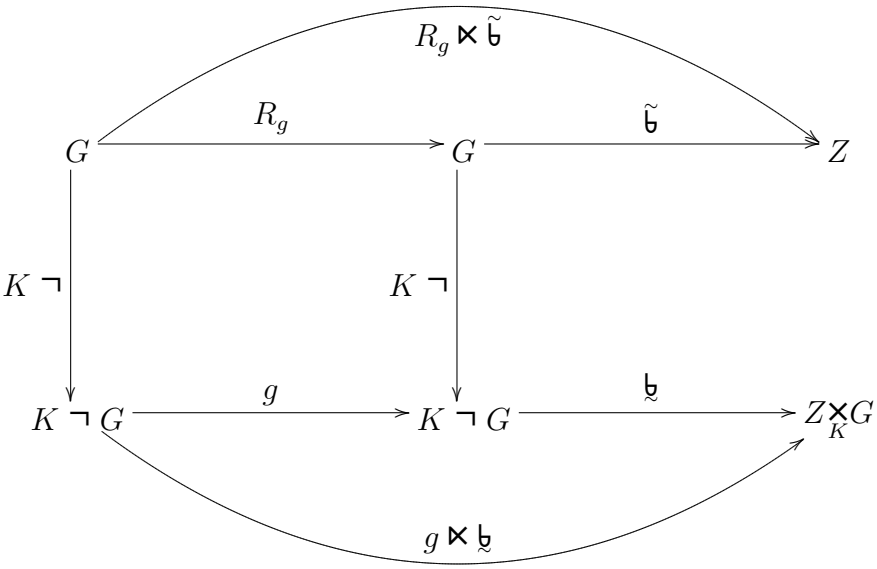
$$\underline{M} \underset{K}{\times} G = \begin{cases} \mathfrak{b}{:}g \sim \mathfrak{b}k^{-1}{:}kg \\ \mathfrak{b} \in Z{:}g \in G \end{cases}$$




$$\dot{x}:g = \dot{x}\ {}^{o}\underline{g}$$

$$Z \ni \begin{cases} \widetilde{\mathfrak{b}}_{\gamma_x} = \mathfrak{b}_x\ {}^{x}_{1/2}B_x \\ \widetilde{\mathfrak{b}}_g = \mathfrak{b}_{og}\ {}^{o}\underline{g} \end{cases} \quad \Longrightarrow \widetilde{\mathfrak{b}}_{kg} = \mathfrak{b}_{okg}\ {}^{o}\underline{\underline{kg}} = {}^{o}\underline{k}\ {}^{ok}\underline{g}\ \mathfrak{b}_{og} = \mathfrak{b}_{og}\ {}^{o}\underline{g}\ {}^{o}\underline{k} = \widetilde{\mathfrak{b}}_g\ {}^{o}\underline{k}$$

$$Z\times(og) \ni \begin{cases} {}^{og}\underline{\mathfrak{b}} = {}^{g}\widetilde{\mathfrak{b}}{:}g = {}^{o}\underline{g}\ {}^{og}\mathfrak{b}{:}g \\ {}^{x}\underline{\mathfrak{b}} = {}^{\gamma_x}\widetilde{\mathfrak{b}}{:}\gamma_x = {}^{x}_{1/2}B_x\ {}^{x}\mathfrak{b}{:}\gamma_x \end{cases}$$




$$\mathfrak{b}_x \overset{\blacktriangledown}{\underset{x}{\blacktriangledown}} \mathfrak{b}_x = \widetilde{\mathfrak{b}}_{\gamma_x} \overset{\blacktriangledown}{\blacktriangledown} \mathfrak{b}_{\gamma_x}$$

$$\underbrace{\mathfrak{b}\,\widehat{\nabla \dot{x}}}_{x} = \underline{\mathfrak{b}}_x\,\dot{x} - \underbrace{\mathfrak{b}_x \overset{*}{\dot{x}} \dot{x}}$$

$$\widetilde{\mathfrak{b}}_g = \mathfrak{b}_{o\,\cdot\,g}\,{}^{o}\underline{g}^{-1}$$

$$\widetilde{\mathfrak{b}}_{\gamma_x} = \mathfrak{b}_x\,{}^{o}\underline{\gamma_x}^{-1} = \mathfrak{b}_x\,{}^{x}B_x^{1/2}$$

$$\underline{D}_x \ni \underset{\sim}{\mathfrak{b}}_x = \widetilde{\mathfrak{b}}_{\gamma_x}\,{}^{o}\underline{\gamma_x} = \mathfrak{b}_x \in Z$$