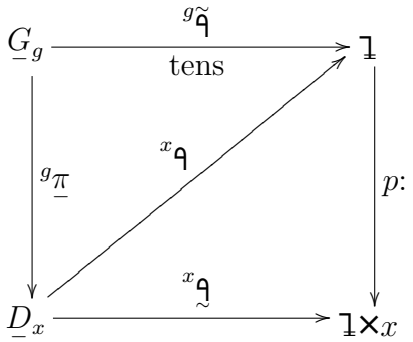

$$p{:}\overbrace{\dot{p}_1\cdots\dot{p}_m{}^{p}\widetilde{\mathfrak{q}}} = \dot{x}_1\cdots\dot{x}_m{}^{x}\underset{\sim}{\mathfrak{q}}$$

$$\dot{p}_1\,\dot{p}_2{}^{p}\widetilde{\Omega} = \dot{p}_1\,\dot{p}_2{}^{p}\overbrace{d\widetilde{\mathfrak{q}}} + \frac{1}{2}\underbrace{\dot{p}_1{}^{p}\widetilde{\mathfrak{q}}} \mathbin{\boldsymbol{\times}} \underbrace{\dot{p}_2{}^{p}\widetilde{\mathfrak{q}}}$$

$$\dot{x}_1\,\dot{x}_2{}^{x}\Omega = \underbrace{\mathfrak{b}\underline{R}_g{}^{g}\underline{\pi}}\,\underbrace{\mathfrak{b}\underline{R}_g{}^{g}\underline{\pi}}{}^{g\pi}\Omega \underset{76}{\overset{\text{KN}}{=}} {}^{o}\underline{g}\left(\mathfrak{b}\underline{R}_g{:}\mathfrak{b}\underline{R}_g{}^{g}\widetilde{\Omega}\right)$$

$$= {}^{o}\underline{g}\left(\mathfrak{b}\underline{R}_g{:}\mathfrak{b}\underline{R}_g{}^{g}\overbrace{d\widetilde{\Omega}} + \frac{1}{2}\overbrace{\mathfrak{b}\underline{R}_g{}^{g}\widetilde{\mathfrak{q}}} \mathbin{\boldsymbol{\times}} \overbrace{\mathfrak{b}\underline{R}_g{}^{g}\widetilde{\mathfrak{q}}}\right)$$