$$N \overset{\text{complex}}{\underset{\text{Heisenberg}}{=}} \mathbb{C}^n \times \mathbb{R} \ni z{:}n$$

$$\underbrace{z{:}n}\,\underbrace{\acute{z}{:}\acute{n}} = \underbrace{z+\acute{z}}{:}\underbrace{n+\acute{n}+\frac{\acute{z} \bowtie z - z \bowtie \acute{z}}{4i}}$$

$${}^{z}\overbrace{(w{:}n)^{\nu} \urcorner} = {}^{z+w}\urcorner\; {}^{z}\mathcal{E}_w^{-\nu}\, n^{\nu}\; {}^{w}\mathcal{E}_w^{-\nu/2}\, n^{\nu}$$

$${}^{z}\overbrace{\mathfrak{t}_w^{\nu} \urcorner} = {}^{z+w}\urcorner\; {}^{z}\mathcal{E}_w^{-\nu}\; {}^{w}\mathcal{E}_w^{\nu/2}$$

$$\underbrace{(w{:}n)\,\check{\ltimes}\urcorner} \barwedge \underbrace{(w{:}n)\,\check{\ltimes}\acute{\urcorner}} = \urcorner \barwedge \acute{\urcorner} \text{ unitary}$$

$$\underbrace{\mathfrak{t}_w^{\nu}\urcorner} \barwedge \underbrace{\mathfrak{t}_w^{\nu}\urcorner\!\!\!-} = \int^{\mathbb{C}^d} \frac{d\bar{z}dz}{(2\pi i)^d}\, {}^{z}e_z^{-\nu}\; {}^{z}\overbrace{\mathfrak{t}_w^{\nu}\urcorner}^{*}\; {}^{z}\overbrace{\mathfrak{t}_w^{\nu}\urcorner\!\!\!-}$$

$$= \int^{\mathbb{C}^d} \frac{d\bar{z}dz}{(2\pi i)^d}\, {}^{z}\mathcal{E}_z^{-\nu}\; {}^{z+w}\urcorner^{*}\; {}^{z+w}\urcorner\!\!\!-\; {}^{w}e_w^{-\nu}\; {}^{z}e_w^{-\nu}\; {}^{w}e_z^{-\nu}$$

$$= \int^{\mathbb{C}^d} \frac{d\bar{z}dz}{(2\pi i)^d}\, {}^{z+w}\urcorner^{*}\; {}^{z+w}\urcorner\!\!\!-\; {}^{z+w}\mathcal{E}_{z+w}^{-\nu} = \urcorner \barwedge \urcorner\!\!\!-$$