$$v'_k = \Gamma^+(v_k;\, \zeta_{v_k}) \equiv v_k \odot \exp\left(\frac{\varepsilon_v^k}{2} s_v^k(\zeta_{v_k})\right) - \frac{\varepsilon_v^k}{2}\left[\partial_x S(x_k) \odot \exp\left(\varepsilon_v^k q_v^k(\zeta_{v_k})\right) + t_v^k(\zeta_{v_k})\right]$$

$$\overbrace{\phantom{v_k \odot \exp\left(\frac{\varepsilon_v^k}{2} s_v^k(\zeta_{v_k})\right)}}^{v \text{ scaling}} \quad \overbrace{}^{\text{force scaling}} \quad \overbrace{}^{\text{translation}}$$

$$x'_k = m^k \odot x_k + \bar{m}^k \odot \Lambda^+(x_k;\, \zeta_{v_k}) \equiv x_k \odot \exp\left(\varepsilon_x^k s_x^k(\zeta_{x_k})\right) + \varepsilon_x^k\left[v'_k \odot \exp\left(\varepsilon_x^k q_x^k(\zeta_{x_k})\right) + t_x^k(\zeta_{x_k})\right]$$

$$\underbrace{\phantom{x_k \odot \exp\left(\varepsilon_x^k s_x^k(\zeta_{x_k})\right)}}_{x \text{ scaling}} \quad \underbrace{}_{v \text{ scaling}} \quad \underbrace{}_{\text{translation}}$$