$$\begin{aligned}
\mathrm{dyn}_{(f \fatsemi g) \fatsemi h} : \mathbf{U}_f \times ((\mathbf{X}_f \fatsemi \mathbf{X}_g) \fatsemi \mathbf{X}_h) &\to (\mathbf{X}_f \fatsemi \mathbf{X}_g) \fatsemi \mathbf{X}_h \\
\langle u, [x_f \fatsemi x_g \fatsemi x_h] \rangle &\mapsto [\mathrm{dyn}_{f \fatsemi g}(u, [x_f \fatsemi x_g]) \fatsemi \mathrm{dyn}_h(\mathrm{ro}_{f \fatsemi g}([x_f \fatsemi x_g]), x_h)] \\
&= [\mathrm{dyn}_f(u, x_f) \fatsemi \mathrm{dyn}_g(\mathrm{ro}(x_f), x_g) \fatsemi \mathrm{dyn}_h(\mathrm{ro}_g(x_g), x_h)].
\end{aligned}$$