let $X, Y, Z \in \mathrm{Ob}_{\mathbb{C}}$, and let $f: X \to MY$ and $g: Y \to MZ$ be morphisms in \mathbb{C} (so, they are Kleisli morphisms). Their *Kleisli composition* is the morphism in \mathbb{C}

Definition (Kleisli composition). Let $\langle M, un, mu \rangle$ be a monad on a category **C**,

 $X \xrightarrow{f} M(Y) \xrightarrow{Mg} (M \circ M)(Z) \xrightarrow{\text{mu}_Z} M(Z).$

given by the composition