

**Definition** (Kleisli morphisms). Let  $\langle M, \mu, \eta \rangle$  be a monad on a category  $\mathbf{C}$ , and let  $X, Y \in \mathbf{Ob}_{\mathbf{C}}$ . A *Kleisli morphism*  $X \rightarrowtail Y$  is morphism of  $\mathbf{C}$  of the form  $X \rightarrowtail MY$ .