

Definition (Twisted arrow category). Given a category \mathbf{C} , we denote its *twisted arrow category* by $\text{Tw}(\mathbf{C})$. This is a category which is composed of:

1. *Objects*: Arrows (morphisms) in \mathbf{C} .
2. *Morphisms*: A morphism between two arrows $f : X \rightarrow Y, g : Z \rightarrow W$ is given by the pair of arrows $\langle h, i \rangle$ such that the following diagram commutes:

