Definition (External and internal hom)**.** The set $\mathrm{Hom}_{\mathbf{C}}(A, B)$ of morphisms between A and B is known as the *external hom*, and is canonically defined for every category $\mathbf{C}$. For certain categories, however, there is also an *internal hom* $[A, B] \in \mathbf{C}$ which satisfies

$$\mathrm{Hom}_{\mathbf{C}}(A, B) \simeq \{f \,:\, \mathbf{1} \to [A, B]\},$$

where $\mathbf{1}$ is the monoidal unit in $\mathbf{C}$; we say that $\mathrm{Hom}_{\mathbf{C}}(A, B)$ is the set of *generalized elements* of $[A, B]$.