**Definition** (Adjunction, Version 1)**.** Let $\mathbf{C}$ and $\mathbf{D}$ be categories. An *adjunction* from $\mathbf{C}$ to $\mathbf{D}$ is given by the following data:

1. A functor $L : \mathbf{C} \to \mathbf{D}$ (the *left adjoint*);
2. A functor $R : \mathbf{D} \to \mathbf{C}$ (the *right adjoint*);
3. A natural isomorphism $\tau : \mathrm{Hom}_{\mathbf{D}}(L-;-) \Rightarrow \mathrm{Hom}_{\mathbf{C}}(-;R)$

We use the notation $L \dashv R$ to indicate that $L$ and $R$ form an adjunction, with $L$ the left adjoint and $R$ the right adjoint.