

A commutative diagram illustrating a natural transformation α between two functors F and G from category \mathbf{C} to category \mathbf{D} .

The diagram consists of the following elements:

- Category \mathbf{C} on the left and category \mathbf{D} on the right, both in bold black font.
- Functor F at the top, with a curved arrow pointing from \mathbf{C} to \mathbf{D} .
- Functor G at the bottom, with a curved arrow pointing from \mathbf{C} to \mathbf{D} .
- A natural transformation α in the center, represented by a downward-pointing arrow from the F arrow to the G arrow, with the symbol α to its right.

The diagram shows that for any object in \mathbf{C} , the image of the object under F and G are related by the component of the natural transformation α .