



### Why

Often the precepts and postcepts are elements of  $d$ -dimensional and  $m$ -dimensional space, respectively. Moreover, we often believe in the existence of a functional prelation between these two spaces.

### Definition

We think a vector in  $d$ -dimensional space and a vector in  $m$ -dimensional space are approximately related by a function. We call the argument to the function the *independent variable* and we call the result of the function the *dependent variable*. If  $m = 1$ , the dependent variable is a single real number.



