

Objects  $(f, B)$ :

$$\begin{array}{c} C \\ \downarrow f \\ F(B) \end{array}$$

Morphisms  $h : (f, B) \longrightarrow (f', B')$

$$\begin{array}{ccc} & C & \\ f \swarrow & & \searrow f' \\ F(B) & \xrightarrow{F(h)} & F(B') \end{array}$$