

Arrow examples

Taichi Uemura

$$a \text{ --- } b$$

$$a \Rightarrow b$$

$$a \xrightarrow{f} b$$

$$a \xrightarrow{\text{oooooooooooo}} b$$

$$a \xrightarrow{\text{oooooooooooo}} b$$

$$P \xrightarrow[\text{By Yoneda}]{} Q$$

$$a = b$$

$$X \xrightarrow{p} Y$$

$$X \xrightarrow{\text{hom}} Y$$

$$X \xrightarrow{\exists f} Y$$

$$X \xRightarrow{f} Y$$

$$A \xrightarrow{R} B$$

$$A \xrightarrow{R} B$$

$$A \xrightarrow{i} B$$

$$A \ni x \xrightarrow{g \circ f} y \in B$$

$$X \stackrel{P}{\mapsto} Y$$

$$X \stackrel{P}{\Rightarrow} Y$$

$$X \xrightarrow[p]{\quad} Y$$

The diagram shows the word "XY" on the left and "fY" on the right. A red box encloses the "X" in "XY" and the "f" in "fY". A green box encloses the "Y" in "XY" and the "Y" in "fY". This illustrates a mapping where the "X" is replaced by "f" while the "Y" remains unchanged.