

$$\begin{array}{ccccc}
X' & \xrightarrow{i_X} & X & \xrightarrow{p_X} & X' \\
\downarrow a' & & \downarrow \text{TCofib} & & \downarrow a' \\
& & E & \xrightarrow{k} & P \\
& \nearrow s & \downarrow \text{TFib} & & \searrow l \\
Y' & \xrightarrow{i_Y} & Y & \xrightarrow{p_Y} & Y'
\end{array}$$

The diagram illustrates a commutative structure involving objects  $X'$ ,  $X$ ,  $Y'$ ,  $Y$ ,  $E$ ,  $P$ , and  $Y'$  (repeated). The horizontal arrows are labeled  $i_X$ ,  $p_X$ ,  $i_Y$ , and  $p_Y$ . The vertical arrows are labeled  $a'$ ,  $\text{TCofib}$ ,  $\text{TFib}$ , and  $a'$ . The curved dashed arrow is labeled  $s$ , the horizontal dashed arrow is labeled  $k$ , and the diagonal dashed arrow is labeled  $l$ . A square symbol  $\square$  is present in the upper right quadrant.